

ready set remember

Short-term auditory memory activities

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About the book

This book aims to:

- support teachers, parents and others in their understanding of short-term auditory memory and its importance in children's learning and behaviour;
- promote an understanding of the classroom implications of short-term auditory memory delay;
- supply resources for careful structured observation of children's performance on short-term auditory memory tasks; and
- improve active listening skills for all the children in the class, not only those with short-term auditory memory difficulties.

The book does not aim to 'cure' short-term auditory memory difficulties, rather to teach active strategies to work within the auditory memory capacity for each child.

Ready Set Remember provides games and activities for classroom and small group use. The activities are written for children from Prep—Grade 2, but can be adapted for use with younger children as well as older children with learning disabilities.

We have written the activities for classroom teachers, but they could be easily adapted for individual use by speech pathologists, audiologists, educational psychologists or special education teachers and others working with children in a 1:1 learning situation.

Conventions

In this book the child is referred to as 'he' and the leader as 'she'. The sample evaluation sheets give hypothetical responses from both males and females.

Foreword

Listening skills, processing auditory information and remembering what has been said are all central to learning in a classroom environment. Children do gradually improve in their ability to process auditory information throughout childhood and into adolescence, but it has become increasingly clear for those of us who work with children who are struggling to achieve basic literacy skills that a delay in this development is very commonly associated. It is crucial for those who teach children to be aware of what is 'normal' and adjust our communication appropriately. It is certainly not a case of 'more is better'.

For children who are developing this skill at a normal rate, or for those who are delayed, other factors can play a part so that they are not functioning at their optimum level. When any of us cannot hear clearly because of noise, do not understand the language or the terminology, or are distressed, inattentive or bored, we often stop listening. If there is little return for the effort of listening, then it is easy to 'switch off'. Some of our children in classrooms have been described as bobbing up and down in a sea of 'Blah ... blah' and only coming up for air when there is the odd word of interest. In our current society with the focus on visual learning and information overload, there is a tendency to not listen and to not train ourselves or our children to listen.

This book has some very useful observations of children's listening behaviour with explanations and implications for learning. The exercises and strategies are also very helpful for teaching children how to optimise their listening skills and these learning strategies are then transferable to other areas of learning.

The vast experience of the authors in observing, working with and assisting children with language and listening difficulties is clear from the materials presented. This book will be a very helpful resource for teachers to use in the important task of giving children strategies for learning and listening. Children who have difficulties in these areas often need to have these strategies taught explicitly. They do not usually learn these strategies intuitively, as is evident by the large numbers of children coming to health professionals with behavioural difficulties often secondary to their failure to acquire adequate literacy skills. Using a combination of good pedagogical practice that takes into account the development of auditory processing skills, and these strategies to optimise listening skills in a classroom setting, hopefully health professionals such as paediatricians and speech pathologists will need to see fewer children who have these problems.

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classroom listening and remembering

Introduction

Efficient listening skills are essential for children—for classroom learning and for successful social interactions. The importance of listening is recognised across all areas of the school curriculum in Australia.

Teachers understand the importance of classroom listening, and can identify children who are having difficulty listening, but are often not given either tools for understanding these difficulties or strategies to deal with them. This book aims to introduce the reader to some of the underlying abilities a child needs for effective listening—adequate hearing, intact auditory processing skills and an 'active listening' mindset—and to provide teachers with strategies to improve the listening skills of the children in their classrooms.

a Hearing

Adequate hearing is, of course, essential for good listening and good comprehension of what is said. Hearing is the first basic requirement for making sense of the spoken word, and when hearing is impaired many aspects of listening will be difficult for the child. When a listening problem is suspected, it is important to assess the child's hearing to ascertain whether the problem is due to poor hearing rather than more complex auditory processing problems.

Many children in the early school years suffer from conductive hearing losses. These can occur from fluid build-up in the middle ears, from ear infections or other causes. When there are repeated ear infections, a visit to the family doctor is recommended. If problems persist, an Ear Nose and Throat specialist can be consulted. A paediatric audiologist should be responsible for assessing a child's hearing.

b Auditory processing

The ability to process auditory information is essential if a child is to comprehend the spoken word. 'Auditory processing' has been defined as 'the ability to hold, sequence, and process accurately what is heard' (Rowe, Pollard & Rowe 2003).

There are many aspects to auditory processing. It covers abilities such as auditory localisation; auditory discrimination; auditory sequencing; auditory figure—ground perception; and auditory closure.

Successful auditory processing depends on adequate functioning of the outer ear, the middle ear and the inner ear, as well as the auditory nerve pathways from the inner ear to the brain. It also needs adequate functioning of all the different parts of the brain that process the incoming electrical impulses and organise them so that they are recognisable to us as speech sounds in a particular sequence.

As yet there is no agreement about the precise causes of auditory processing disorders. Various models have been presented to explain how a breakdown in the auditory system at different levels could produce particular types of difficulties.

c Active listening

While 'hearing' can be a passive process, 'listening' is an active process where the listener is focusing on the incoming sounds or words. For good classroom listening the child needs to actively engage with what is being said.

Children cannot actively listen to information that they cannot hear adequately, so always consider hearing loss when listening problems are observed.

Short-term auditory memory

One aspect of auditory processing involves the retention of auditory information to allow time for word recognition, and for comprehension to occur. This retention of auditory information is often referred to as 'short-term auditory memory'. The capacity of the short-term auditory memory does increase with age (Tan 2000). However, delays in the development of short-term auditory memory skills can result in the child experiencing difficulties in a range of areas including the ability to follow directions, to pay attention and to acquire literacy. It can impact on social as well as academic development and can lead to frustration and diminished self-esteem (Tan 1999).

There is a wide variation in the short-term memory skills of children in the early years at school (Rowe et al. 2004). In a large study investigating the relationships between literacy, behaviour and auditory processing, Rowe and her colleagues reported that 30 per cent of children in the age groups 4.7–5 years, 6–7 years, and 7–8 years were unable to accurately process sentences of 9, 10, and 11 words respectively. They found that at school entry 7 per cent of children had a digit span of 2 digits or less. An additional 15 per cent were 'at risk' of literacy underachievement during their three subsequent years of schooling, since they had either a digit span of 3 digits or a sentence length of 8 words or less. Consequently we can predict that in

any classroom there will be a number of children who struggle to deal with the amount of auditory information being delivered.

Lack of school progress, inappropriate behaviour and poor attention are possible indicators of poor short-term auditory memory. Ongoing difficulties in this area can cause further behavioural and literacy difficulties. With early identification and effective strategies in place, the impact on the child's behaviour and learning can be minimised (Rowe et al. 2004).

Identification

Children with short-term auditory memory difficulties may present in a variety of ways. They may:

- be unresponsive to verbal instructions
- · seem distracted
- appear shy and withdrawn
- appear to daydream
- say 'What?' a lot
- look blank
- be talkative
- become frustrated
- present as lacking confidence.

Descriptions of typical children with short-term memory difficulties

Stevie is six years old and in his first year at school. His parents elected to delay school entry on the advice of his preschool teacher as he did not follow instructions well and seemed immature. Stevie is a cheerful, energetic boy. He finds it difficult to sit quietly and he usually has a comment about what he is doing and what others are doing. He often calls out during 'Show and Tell'. His teacher seems to often say—'Stevie, get on with your work and don't worry about what X is doing'. Stevie is learning his sight words and is making progress with reading. The other children in the class tend to blame Stevie when something goes wrong.

Sharon is in Grade 1 (second year at school) and up until beginning preschool Cantonese was her only language. Her speech is a little difficult to understand and her mother says that this is also the case in Cantonese. Sharon often looks blank and is slow to respond. She has made little progress with reading and writing—she makes up a story from the pictures and writes strings of letters. She has just commenced Reading Recovery. Her teacher last year felt that her slow progress was due to ESL issues but her current teacher suspects that there is more going on. A hearing test last year indicated normal hearing. After consulting Sharon's parents, her teacher has asked for the school's educational psychologist and speech pathologist to become involved.

John is in Grade 2 (third year at school). He has missed a lot of time from school and often has a runny nose. He had grommets in his ears as a preschooler and the ENT specialist felt that he would outgrow his ear infections. He is an imaginative boy who talks knowledgeably about dragons and castles. He is good at maths. The other children tolerate John rather than seek out his company. He seems to daydream a lot, often looking out of the window; however, he does maintain his attention to the task during hands-on activities. His parents wonder if he is bored in class. His reading is behind and he avoids reading his readers but likes to be read to. He has a satisfactory sight vocabulary but often seems to look at the first sound of an unfamiliar word and make an incorrect guess at what it is. He does not read fluently. His teacher and parents are worried about how he will cope with the demands of the upper primary school.

Assessment

When children experience difficulties in the areas of attention, literacy, learning, social skills or behaviour, they are often referred for assessment by speech pathologists, psychologists, paediatricians or audiologists. Frequently these assessments find that the child is experiencing difficulties with auditory processing or short-term auditory memory (Rowe et al. 2004).

These children usually have normal hearing. There is discussion in the literature about the impact of early ear infections on later listening and literacy skills (Mody et al. 1999; Nittrouer & Burton 2005; Roberts et al. 2004), with some studies proposing a connection and others not finding a connection. In our experience, children with a history of frequent middle ear infections have a greater risk of developing short-term auditory memory and listening problems.

The assessment of short-term auditory memory often involves asking the child to repeat a series of numbers or repeat sentences of increasing length. This type of assessment can identify children who mishear and misunderstand language even though they have normal hearing (Heine 2003).

The suggested sentence lengths that young children can retain are outlined below (Tan 2000).

Age (years)	Stage	Sentence length (words)
3–4		4 or 5
4–5	Kindergarten	6 or 7
5–6	Prep Grade	8 or 9

Prep children who can recall three or more digits and sentences of eight or more words are considered to have adequate short-term auditory memory skills. If a Prep child recalls fewer than 3 digits or 8 words he is considered to have delayed short-

term auditory memory skills. If a child has poor English, he may be able to recall an adequate number of digits but have a low sentence recall. In this case his skills should be monitored as he acquires English (Auditory Processing Assessment Kit 2001).

A recent large study in Victoria (Rowe et al. 2004) investigated the relationship between digit span, sentence length, literacy achievement and behaviour. Data was obtained from 10126 primary school-aged children. Median values for digit span and sentence length are displayed in the table below.

Age group	Digit span (median value)	Sentence length (median value)
4.7–5 years	4 digits	8 words
5–6 years	4 digits	9 words
6–7 years	4 digits	10 words
7–8 years	4 digits	11 words
8–9 years	4 digits	13 words
9–10 years	4 digits	13 words
10-11 years	5 digits	14 words
11–12 years	5 digits	14 words

Median values for digit span and sentence length by eight age groups (Rowe et al. 2004).

Initially teachers can screen auditory memory skills using the Auditory Processing Assessment Kit produced by the Department of Education, Employment and Training and the Royal Children's Hospital (2000). If appropriate teaching strategies have been implemented (see pages 10–12) and concerns continue, auditory memory skills can be more fully assessed by a number of professionals including audiologists, psychologists, paediatricians and speech pathologists.

Factors affecting a child's ability to remember

There are many things that affect the way we remember information. These include:

1 Hearing acuity

Our ability to accurately hear the initial message will impact on our ability to process it accurately. When an auditory processing difficulty is suspected, it is important to rule out the presence of a hearing loss.

2 Attention

If we are not paying attention, we are less likely to remember what has been said.

3 Our knowledge of the topic

When we are already knowledgeable about a topic, we tend to integrate new information into what is known. Known information provides a skeleton or framework to 'hang' our new knowledge on.

4 Interest

It is easier to learn new information if we are interested in it. For example, children hearing the details of a zoo excursion are likely to find it easier to actively listen and remember the information than when listening to the details of homework tasks.

5 Motivation

During formal testing of short-term auditory memory skills some children may not be intrinsically motivated to perform at the peak of their ability. An individual child's performance may be enhanced by offers of simple rewards.

In game situations children are often motivated by the fun of participating. Some children become motivated by the competitive aspects of the game and love the chance of 'winning'.

6 Message complexity

The simpler the message, the easier it is to remember. Simpler does not always mean shorter. It means the language used to convey the message is easier to understand.

7 Length of the information

The longer a piece of information is, the more difficult it is to remember. If the auditory memory is overloaded, the full message will not be processed and stored.

8 Speed

The speed of the auditory information presented affects our ability to process it effectively (Bellis 2003). If it is presented very quickly, it is difficult to register all that is said. If information is presented too slowly we sometimes forget bits and lose the point of what is said. Pauses between key pieces of information help us remember each piece presented.

9 Energy

The more tired we are, the harder it is to concentrate on and remember auditory information. It is more likely that we will forget the information. Children who are tired are more likely to have difficulty attending to incoming auditory information and may not remember what is said.

10 Predictability

The more predictable information is, the easier it is to remember, because it links into known information. Also, in a known situation less information has to be imparted and there is less need for clarification.

11 Emotional wellbeing

A child's capacity to focus on auditory information is in part related to their emotional wellbeing. It is hard for a child to attend to and remember what the teacher is saying in class if he feels concerned about other issues.

12 Physical wellbeing

The 'unwellness experience' contributes to a child's inattention and therefore his ability to remember the communication. Children who have frequent colds and ear infections may fall into this category.

Relationships between short-term auditory memory, listening and literacy

Children with auditory memory difficulties are at risk for problems with literacy skills (Rowe et al. 2004). They may also experience difficulty in learning in areas where language is critical, for example reading comprehension and story writing (Tan 1999).

Reading is a process of deriving meaning from print that takes place within a language framework. Receptive language involves the understanding of language through either listening to a spoken message, or reading a written message. Expressive language involves the organising of a message in either talking or writing.

Reading takes place where children are using:

- 1 grapho-phonemic cues—letters, sounds and basic sight words
- 2 semantic cues—vocabulary, concepts
- 3 syntactic cues—grammatical structures.

It is when all three cueing systems interact, that is, the child can decode, understand the words used and use their grammar to gain meaning, that successful reading occurs.

In order for the child to be able to use the grapho-phonemic system they must be able to remember the sequence of sounds and blends to form the words. For example, when reading J U M P the child must be able to:

- recognise each letter
- generate the sound represented by the letter
- hold the sound pattern long enough in their working memory to blend the sounds together to form the word 'jump'.

Children must then remember the sequence of words decoded, to produce sentences and construe meaning from the sentence read.

Children must be able to remember a number of related sentences in the text to make sense of the text as a whole, and to see the interrelationship of the words and ideas presented. Children who have forgotten what they have decoded by the time they have reached the end of the page, are not 'reading for meaning' but rather just decoding print—one aspect of the reading task.

PHONOLOGICAL AWARENESS

The successful acquisition of literacy is strongly related to the level of phonological awareness. 'Phonological awareness' refers to knowledge about the sound structure of the language and the ability to manipulate the sound units that make up words (Dodd & Gillon 2001). The child needs to be able to identify individual sounds within words, deconstruct words into 'sound sequences', and to blend sequences of sounds to create words. These skills are dependent on short-term auditory memory. Rowe et al. (2004) reported that children with auditory memory difficulties have problems acquiring letter-sound links and basic phonological knowledge.

There are many excellent resources available in the area of phonological awareness.

Strategies to support short-term auditory memory in the classroom

Teachers can play a pivotal role in enabling students with limited short-term memory to access the curriculum. They can adapt the classroom learning environment and explicitly teach listening strategies. By implementing the strategies for the teacher (pp. 11–12)—particularly slowing down, chunking verbal information and using frequent pauses to allow time for processing—teachers significantly reduce the load on shortterm auditory memory that is placed on their students. Although children need to take responsibility for their own listening, many do not naturally do this and opt for a more passive role. Teachers can alter these behaviours by implementing the strategies for the *child* (pp. 13–15) and using the activities in this book to practice listening skills.

Strategies for the teacher

The teacher's awareness of short-term auditory memory issues and implementation of appropriate management strategies can play a critical role in the child's ability to maintain attention in the classroom (Rowe et al. 2004). In fact, Rowe et al. (2004) provide evidence that for many children, the use of appropriate teaching strategies in the classroom will improve both listening and literacy skills, without the need for complex assessment and intervention. There are some children, however, who do need further investigations.

There are many things that the teacher, parent or health professional can do to minimise the impact of a short-term auditory memory delay. These include:

- gaining the children's attention prior to speaking (Tan 1999; Bellis 2003);
- using shorter, simpler sentences in logical order, using pauses to allow processing time (Tan 1999);
- using visual supports for instruction (for example, pointing, pictures, objects). Note—this may not be appropriate for the group of children who have difficulty integrating visual and auditory information (Bellis 2003);
- putting explanations and instructions in context (Bellis 2003);
- allowing extra time for the child to think and respond when answering questions (Tan 2000; Gilber 2004);
- encouraging the child to clarify if he has not understood what was said;
- using comprehension checks to determine if key instructions have been understood;
- monitoring inappropriate responses—these may indicate the child has misheard the speaker;
- being ready to consider the possibility of genuine misunderstanding (Tan 1999);
- placing the child at the front of the room or close to the teacher's usual teaching position;

- if repetition is requested, giving it and making it shorter and slower (Bellis 2003);
- reducing background noise and distractions when giving important instructions (Tan 1999):
- supporting complex information with a simple example;
- encouraging the child to 'chunk' and use punctuation well when reading;
- allowing *cue cards* or scripts for recitation;
- remembering that anxiety decreases listening ability;
- developing classroom routines that reduce the listening load (Tan 1999);
- monitoring personal organisation—these children often forget instructions which means homework is often not completed or brought back to school. Jumpers, library books, sports equipment, etc. are frequently lost;
- once literacy is established, encouraging the use of diaries and timetables to support learning and organisation. Use picture prompts for younger children who have not developed their literacy skills;
- being aware of a reported history of not paying attention;
- discussing with parents/guardians whether forgetfulness or inattention is a behaviour observed at home;
- being prepared to refer the child to a paediatric audiologist for auditory processing assessment if you suspect a problem exists. Then be prepared to implement the suggestions made by the audiologist;
- assuming that children with short-term auditory memory difficulties can learn. These children all have a specific learning difficulty; however, they show a range of general cognitive abilities. Present material appropriate to their learning needs and expect success.

Strategies for the child

In this book we are aiming to help children develop strategies to efficiently and effectively remember auditory information.

1 Active listening

In order to be successful listeners, children need to listen actively and to understand that they are responsible for their own listening success. Whole body listening techniques include an alert posture, looking at the speaker and reducing excessive movements (Bellis 2003).

As teachers we often ask children to listen, but we often don't tell them how to do this. It is easy to think of listening as a passive experience, but it actually requires active engagement. In order for them to gain the most from classroom directions and discussions, all children should be taught how to listen. This is a process that will take time and ongoing reinforcement; however, three introductory steps are outlined below:

a DISCUSSION

Ask the children how they listen. Typically the answers will include that they use their ears. This then provides an opportunity for you to ask how their eyes might help with listening (to look at the person who is speaking) and how their brains might help (to think about what the person is saying). Even the hands can help (by keeping still).

b ESTABLISHING THE 'RULES FOR GOOD LISTENING'

Through discussion the class can compile a list of rules for good listening that should include:

- sit still
- look at the person who is speaking (focus your attention)
- think about what they are saying (not what you know about the topic)
- ignore background noise
- don't interrupt the speaker
- wait until they have finished speaking to ask questions.

c TRY SOME ACTIVE LISTENING

Tell the children that you are going to tell them about a special dinosaur.

I'm going to tell you about a very special dinosaur. It is a very tall dinosaur, as tall as a very tall tree. It has a very long neck with a small head. It can eat the juicy young leaves from the treetops. It has thick strong legs and it leaves big footprints wherever it goes. It weighs more than three elephants and the ground shakes when it walks. My dinosaur has a long tail which it sometimes uses to balance on its back legs.

Then ask the children to tell you about YOUR dinosaur. It's important for this exercise that they stick to what they have heard, and do not include extra thoughts that your description has triggered.

2 Getting ready to listen

This is related to attention. It is easier to remember if you are tuned in to listening to the message being given. A helpful strategy for the child is to look at the speaker in order to focus their attention. Particular situations where it is especially important for the child to be prepared to listen is when there is background noise and when they need to do several things at once (Bellis 2003).

BACKGROUND NOISE

Explain to the children that when it is noisy they have to listen extra hard to hear the important information. They have to think about what the speaker is saying and ignore the background noise. It can also help to look at the speaker's face and sit at the front near the speaker. They have to make an effort to think about the person they are listening to.

DISTRACTIBILITY

Tell the children that if they are asked to remember something and then they have to do something else, this means they have to work extra hard to remember the information.

3 Visualisation

Visualisation means making a picture of something in your head so that you can remember it. When we make an internal visual image of information that we have heard, it helps us to remember the information.

4 Rehearsal

This involves the repetition of words, either silently to yourself or quietly out aloud, so that it is more easily remembered (Chermak & Musiek 1992). For example, if you are given a telephone number to remember, you say it over and over to yourself to hold onto it before you write it down or key the numbers into the telephone.

5 Links

Linking ideas helps children remember information because it helps them to group like things together. One way of linking is to use categories.

6 Key words or 'listening for meaning'

Key words are the main ideas in a message. When we talk, much of what we say is not needed.

For example, 'It's almost time to go, so make sure you've cleaned your teeth and brushed your hair. We don't want to be late.'

The key words are underlined:

'It's almost time to go, so make sure you've cleaned your teeth and brushed your hair. We don't want to be late.'

This links back to both rehearsal and visualisation because it is really only the key words that need to be either rehearsed or visualised. If short-term auditory memory is compromised it is vital the important information is retained; anything else is a bonus!

7 Chunking

Chunking is where information is broken down into smaller parts that are easier to retain. Encourage the child to use punctuation when reading as this provides pauses between segments of information and aids memory.

8 Note taking

For older children, in particular, encourage them to write down things they need to remember (Chermak & Musiek 1992). Encourage the use of a diary to record important information at school.

9 Exploration of listening

One useful task for children is to think about how they listen (Bellis 2003). This is a metacognitive task and one that is useful for adults as well as children.

10 Counting items

Checking items off on our fingers is helpful as it targets how many items we need to remember and can help to trigger recall. If you have to remember four things but can only remember three, knowing there is one more and going over the task of checking it off on our fingers can act as a trigger to recall the item or to ask for help.

Section 2

ready set remember activities

How to use the activities

The activities in this book have been developed by the Ready Set Learn Team, specialists in childhood listening and language, since 1992. These exercises are considered 'good fun' by the children and the staff alike. They are designed to support the development and use of active listening and auditory memory strategies by children. Many of the activities also extend vocabulary and group skills.

Extension

Where possible we have indicated ways for extending the material to make it even more challenging for children. One way of adding a challenge to an activity is through the use of background noise. Play background music to build up the ability to listen in the presence of a competing sound. Also, to increase the difficulty of the task, add a time delay. You can ask the children to do something else before carrying out an instruction. For example, you could ask them to 'Put your hands on your head' or 'Count to 10' or 'Walk around the table', so that they need to 'hold the information in their head' for a longer time before performing the task.

Group size

Information about the suggested group size is given for each activity. This is a guide only. A large group is based on a classroom size of 20 students. If you are able to have two adults present during any of these activities it is much easier to transcribe observations and run the activity. If there are additional adults to help, it is possible to increase the size of the group. If the additional adult is an untrained person, it is useful to spend some time with them prior to the activity so that they know the particular aims of the exercise and what aspects of the child's performance they need to note.

Review activities

The tracking of progress is important, especially for those children who are struggling with short-term auditory memory skills. It is important to know not only how many

items a child can remember, but also the strategies they use to assist with remembering, and how they approach the task. For this reason we have included some review activities (Activities 2–5) which are aimed at assessing rather than teaching. These activities do not focus on any particular strategy but give the leader an opportunity to monitor the child's progress and note any particular features of their presentation.

Additional observations

When there is a concern about a particular child, it is helpful to have a record of structured observations. So that you can monitor a child's progress, it is useful to note in detail the precise behaviours you observe during an activity. A form to assist these observations is provided on page 21.

Materials

An outline including the suggested group size, target strategy, method, support materials necessary and evaluation sheet is given for each activity. All materials are fully reproducible.

Extra support materials are provided for ease of use with some activities. They are printed in the Black Line Master Support Materials section (page 93) following the activity outlines. Where extra material is provided, it is indicated on the list of activities and also on the outline of the individual activity. Support material cards can be laminated to reduce wear and tear.

A range of commercially available materials could also be used with many of the activities. These can be purchased at school supply retailers and educational toyshops.

Evaluation sheets are included with each of the activities. Evaluation sheets help to structure the leader's observations of each child's response to an activity. With each evaluation sheet is an example of how the form could be filled out to use as a guide.

We find it works well to photocopy the appropriate sheet prior to the activity, as it is very helpful to fill out the sheet as the activity progresses rather than at the end.

Eight A4 size posters, which highlight various aspects of active listening, are provided (pages 134 to 141). These reproducible posters can be used in a number of ways.

- They can be coloured in by the children and put up in prominent places around schools and clinics.
- They can be used as visual aids during education sessions.
- They can be used to reinforce the strategies introduced in the activities.

Structured observations

Date:

	I		
Used fingers to count items			
Closed eyes to aid recall			
Was helped by a phonemic cue (first sound)			
Was helped by a semantic cue (description)			
Became frustrated			
Fatigued during the activity			
Rehearsed items silently (mouth movement)			
Rehearsed items aloud			
Engaged in off-task behaviour			
Gave slow or rapid responses			
Maintained attention			
Appeared restless			
Increased or decreased physical activity level			
Used the strategy taught			
Watched others before responding			
Listened before responding			
Maintained appropriate eye contact			
Maintained appropriate interest			
(other)			
(other)			

This chart can be used to make detailed observations of one particular child over time—insert dates or names of activities in top row.

It can also be used to make detailed observations about a number of children—insert names in top row.

List of activities

	Activity	Strategy	Material included	Suggested group size	Page no.
1	Listening circle	exploration of listening		whole class	24
2	Let's listen and do	review task		6–8	26
3	Copycats	review task		whole class	28
4	Looking for goodies	review task		6–8	30
5	Threading	review task		whole class	32
6	I went shopping	rehearsal, linking		4–6	34
7	In the bag	rehearsal, linking		4–6	36
8	Get the loot	rehearsal	YES p. 96	6–8	38
9	Bottom of the ocean	rehearsal	YES p. 97	6–8	40
10	Press the buttons	rehearsal, chunking		whole class	42
11	Now <i>you</i> say it	rehearsal	YES p. 104	6–8	44
12	Special spell	rehearsal, visualisation	YES p. 108	6–8	46
13	Make a picnic	rehearsal	YES p. 109	6–8	48
14	Royal recipes	rehearsal	YES p. 113	6–8	50
15	Colour shape pasting	rehearsal, visualisation		whole class	52
16	Party invitation	rehearsal		4–6	54
17	Tricky pictures	rehearsal	YES p. 117	4–6	56
18	Sound memory race	rehearsal		whole class	58
19	Now you see it, now you don't	visualisation		4–6	60
20	Colour it in	visualisation		6–8	62
21	I see a picture	visualisation	YES p. 120	whole class	64
22	Hold the picture in your head	visualisation	YES p. 123	4–6	66
23	Here and there	visualisation, rehearsal	YES p. 104	4–6	68
24	The underwater cave	visualisation	YES p. 125	4–6	70
25	Bottle memory	visualisation, key words	YES p. 129	whole class	72
26	The name game	linking		whole class	74
27	Word chain – things that belong together	linking		whole class	76
28	Can you help me?	clarification		whole class	78
29	Countdown	counting items		whole class	80
30	Remember and run	counting items, rehearsal	YES p. 104	6–8	82
31	Key words	key words, clarification, counting items	123 p. 10 1	6–8	84
32	Write it down	note taking, key words		whole class	88
33	Things that help you remember	exploration of memory	YES p. 130	whole class	90



activity outlines

Instructions for each activity can be copied and laminated as cards for use at 'work stations' in group situations.

Strategy

Exploration of listening

Method

- 1 Explore with the children how we listen. See discussion on page 13.
- 2 How do you listen in different situations? For example:

At the swimming pool In class At assembly In the playground

Watching TV
Eating dinner
In bed

3 What type of people do you listen to? For example:

Funny people Boring people

Quiet people Loud people

4 What do you like listening to? For example:

The rain Thunder Music

TV Radio

5 Close your eyes and listen—what can you hear?

6 The leader can make a sound while the children close their eyes and see if they can identify it. Sounds might include:

Cutting paper Scrunching paper Rattling pencils Singing Counting Coughing Sneezing
Crying
Laughing
Clicking fingers
Stamping feet
Clapping hands

7 It may be helpful to write down the ideas generated from the discussion to review later.

Materials

Nil (apart from usual classroom items such as pencils and paper).

Sample evaluation form

Name	Participated in discussion Yes/No	Comments
Connor	Yes	Good at identifying sounds he could hear with his eyes closed. Says he finds it hard to hear when it is noisy. Follow up about a hearing test.

Listening circle Evaluation form Date:

Name	Participated in discussion Yes/No	Comments

Aim Review task

Method

- 1 Explain to the group that they have to listen to and follow the instructions. It is important for them to carry out the instructions in the order they are given. The instructions are short in the beginning and they will get longer. The children must not move until all of the instruction has been given and the word 'Go' indicates that they can begin.
- 2 Gain the children's attention before giving the instruction. Tell the children to sit on the floor, cross-legged, hands in lap and to return to this position after each instruction.
- 3 Check that the children understand the vocabulary. Specific concepts may need to be taught, for example, 'behind', 'stretch' and 'wriggle'.
- 4 For children who consistently watch others for cues, it may be helpful to have some individual turns. This can help discriminate whether the child can follow the directions independently.

Instructions

One-stage directions

- 1 Touch your head. Go.
- 2 Hop on one leg. Go.
- 3 Rub your tummy. Go.
- 4 Clap your hands. Go.
- 5 Wriggle your fingers. Go.
- 6 Put your hands on your head. Go.
- 7 Touch your nose. Go.
- 8 Wave your arms. Go.

Two-stage directions.

- 1 Hop on one leg, then rub your tummy. Go.
- 2 Touch your nose, then touch your shoulders. Go.

- 3 Lift both hands over your head and jump up. Go.
- 4 Touch your toes and clap your hands. Go.
- 5 Put your hands behind your head and stretch your legs. Go.
- 6 Nod your head, then wave your arms in the air. Go.
- 7 Touch your ears, then wriggle your fingers. Go.
- 8 Clap your hands, then turn around. Go.

Three-stage directions.

- 1 Hop, stretch and turn around. Go.
- 2 Touch your toes, knees and shoulders. Go.
- 3 Rub your tummy, nose and knees. Go.
- 4 Stretch, yawn and clap your hands. Go.
- 5 Hop on one foot, rub your tummy and say 'Hello'. Go.
- 6 Wriggle your fingers, jump and turn around. Go.
- 7 Touch your ears, touch your nose and hop. Go.
- 8 Stamp your feet, open your mouth and wave. Go.

Four-stage directions.

- 1 Hands up, touch your nose, wriggle your fingers and touch your tummy. Go.
- 2 Touch your knee, shake your head, stand on your toes and clap. Go.
- 3 Blink, touch your head, nod and stamp your feet. Go.
- 4 Jump, touch your ear, shake your hands and nod your head. Go.
- 5 Touch your toes, rub your tummy, jump, then hands on head. Go.
- 6 Touch your nose, rub your tummy, jump, nod. Go.
- 7 Stand up, turn around, take a bow, sit down.
- 8 Stand up, sit down, shake your hands, close your eyes. Go.

Sample evaluation form

Name	Number of items followed	In correct order? Yes/No	Comments
Tom	3—on 2 of 3 trials 4—none recalled	No	Closed eyes to try to remember.
Allanah	3—on 3 of 3 trials; 4—on 2 of 3 trials	Yes	Watched others before responding. *need to check individually

Let's listen and do Evaluation form

Date:

Name	Number of items followed	In correct order? Yes/No	Comments

Activity 3 Copycats

Aim Review task

This activity can be conducted with the whole class. If it is a very large class, you may like to divide it into smaller groups, following the tunes in turn so that you can monitor each child's response.

Method

- 1 'We are going to play a game like follow the leader—where everyone has to copy what the leader does. We are going to have a "clapping band" and we'll have to copy the leader of the band.'
- 2 'First of all, I'll be the leader and you can all be the clappers in the clapping band.' Leader claps out a sequence of claps. Children copy each clapping sequence.

3 'Listen for this tune':

2 beats	4 beats
3 beats	5 beats

- 4 Children copy the band leader.
- 5 Children have turns at being the leader.

Materials

Nil.

Sample evaluation form

Name	Number of beats copied	Comments
Emma	3	Beat is a helpful strategy for Emma.

Copycats Evaluation form	Date:
---------------------------------	-------

Name	Number of beats copied	Comments

Aim Review task

Method

- 1 Arrange an obstacle course.
- 2 Hide 'goodies' around the room.
- 3 Each child in turn needs to listen to the instruction in order to reach the 'goodie'. For example, 'Joel, go under the table, through the tunnel and around the desk. Go.'
- 4 Begin by giving one instruction and increase the length of the instructions as the children have success at each level.
- 5 This activity could be readily adapted to a physical education session.

Suggested instructions

Under the table
Between the chairs
Over the chair
Behind the desk
In front of the book case
Around the fish tank
Over the cushions
Through the tunnel

Materials

- General classroom furniture, for example, tables and chairs.
- 'Goodies', for example, stickers, balloons.

Adaptation

Children can be extended by being instructed to carry out the direction 'slowly' or 'quickly'. More difficult prepositions can be introduced such as 'left', 'right', 'below', 'beside', 'the second', 'the first'.

Name	Knows prepositions. For example, over, under, in front of, behind, around	Number of stages followed	Can follow instructions in correct sequence	Comments
Joel	Didn't know in front of, beside	1—Fine 2—Got lost after first instruction	No	*Repeat game to check *Try other tasks *Hearing test required

Looking for goodies Evaluation form

Name	Knows prepositions. For example, over, under, in front of, behind, around	Number of stages followed	Can follow instructions in correct sequence	Comments

Activity 5 Threading

Aim Rev

Review task

Method

- 1 Give each child a thread and a pile of coloured beads.
- 2 Explain 'We are going to make matching strings of beads'.
- 3 Children put hands on heads while the leader says two colours (for example 'red—blue').
- 4 The leader says, 'Go' and children find the beads and thread them.
- 5 Each child has a turn at saying two colours for the group to find and thread.
- 6 Increase the number of colours the children need to find.

Materials

Coloured beads and thread.

Name	Number of beads in correct sequence	Comments
Annabelle	2	Lost information between instruction and finding beads.

Threading Evaluation form

Name	Number of beads in correct sequence	Comments

Rehearsal Linking

Method

- 1 The children sit in a circle and the leader explains that they are all going on a shopping trip and everyone needs to remember all the things that are bought.
- 2 The leader begins with the carrier phrase 'I went shopping and I bought a hat.' The child on the right repeats the carrier phrase and the leader's item, as well as adding their own 'I went shopping and I bought a hat and an apple ...'. And so on around the group.
- 3 If a child cannot remember an item, have the child who said it originally tell them what it was. Discuss with the children strategies they might use to remember the items. These might include checking off the items on your fingers, looking at the person who said the item and associating the word with them, and repeating the items over in your head.

Materials

Nil.

Adaptation

This game can be adapted in many ways to suit classroom themes or community events. For example:

- On Mother's Day, Mum received (for example, Flowers, chocolates, a hat, a CD, a DVD)
- On Father's Day, I gave Dad (for example, A CD, a DVD, a book, sunglasses, a key ring, chocolates, a shirt)
- For my birthday I got (for example, A ball, a doll, a plant, a kitten, lollies, a DVD, a car)
- At the beach I saw (for example, Seagulls, sand, umbrellas, ice-cream, icy-pole)
- At the farm I saw (for example, A cow, a duck, sheds, a tractor, a donkey)

Name	Number of items remembered	Strategies used	Comments
Sarah	6	Counted items on fingers, looked at person who said item, used gesture (for example said lunch and pretended to eat)	Tried to help other children.

Name	Number of items remembered	Strategies used	Comments

Rehearsal Linking

This is an easier version of Activity 6—I went shopping (p. 34).

Method

- 1 Choose a theme and put the appropriate cards into a bag (a pillowslip makes a good bag).
- 2 The children sit in a circle and the leader gives a brief background to the task. For example, 'Today we are going to the zoo. Let's think about all the animals we might see.'
- 3 The leader selects a card from the bag and says, 'I went to the zoo and saw *a penguin*.' The card is then placed face-up on the table.
- 4 The child to the right chooses a card from the bag and says, 'I went to the zoo and saw *a penguin and a butterfly.*' The card is placed face-up on top of the previous card.
- 5 The game continues until all the cards are taken from the bag or when the memory load is beyond the capacity of the children involved.

Discuss with the children strategies they might use to remember the items. These might include checking off the items on their fingers, looking at the person who said the item and associating the word with them, and repeating the items over in their heads. This is a cooperative rather than a competitive game. If a child cannot think of an item, use a gesture or a verbal clue to assist him. Alternatively, the other children can help him. Verbal clues can be the initial sound or a description of the object or looking back through the cards.

Materials

Bag, small toys or pictures.

Adaptation

- I went to the farm and I saw a ...
- I went to the zoo and I saw a ...
- I went to the beach and I saw a ...
- I went into the house and saw a ...
- My presents were a ...
- I went shopping and bought a ...

Name	Number of items remembered	Strategies used	Comments
Sam	4	Closed eyes to assist memory. Asked for help.	Supportive of peers.

Name	Number of items remembered	Strategies used	Comments

Strategy Rehearsal



Method

- 1 Make the children into pirates by pretending to put on a pirate hat, eye patch and parrot on their shoulder. Explain that they are going to raid another ship and bring back some 'loot'.
- 2 Lay out the picture cards and review the vocabulary involved, then place them on 'the other ship', in another part of the room.
- 3 Send the first 'pirate' to retrieve two objects from the other ship.
- 4 Instruct the child to repeat over—in 'self talk'—
 the instructions three times before they go and
 retrieve the items.
- 5 Check that the child has correctly retrieved the items given.
- 6 Child returns the items to the original position.
- 7 Note the child's response and then send him to the back of the line to wait another turn.
- 8 Repeat for the next child.
- 9 If the child has been successful, for his next turn increase the number of items to be retrieved.

Materials

Cards of objects to be collected (p. 96). Photocopy the page several times so that there are plenty of items for the children to retrieve.

Name	Number of words repeated	Number of items retrieved	Comments
Robert	4	4	With 5, forgot last item. Next time, use background music to challenge Robert.

Get the loot Evaluation form

Name	Number of words repeated	Number of items retrieved	Comments

Rehearsal



Method

- 1 Discuss the items to be found so that the children are familiar with them.
- 2 Pretend that the children are divers who are going to the ocean's bottom to see what's there. 'Have you got your wetsuit on? Goggles adjusted? Oxygen tank filled? Good—you're ready to dive down to the bottom of the ocean.' Discuss the strategy of rehearsal with the children. Explain that they will be told a number of items to retrieve from the ocean floor. They need to rehearse (repeat over and over) the words in the order that they are given. They must not move until you signal that they can begin.
- 3 Consult the numbered word lists (p. 99). Read a particular list to the first child and note the number of the list next to the child's name on a class list. After the child has 'rehearsed' the words, he 'dives' down and 'swims' across the room to retrieve the special things from the bottom of the ocean. Begin by giving each child one item to remember, and with success increase the number of items up to their short-term auditory memory capacity.

- 4 When the child returns, he shows the items he has retrieved and you check that he has retrieved all of the necessary items. The child then returns them to the ocean floor before moving to the back of the line.
- 5 This activity lends itself well to being played with two adults—one helping the children to rehearse the items to be retrieved, the other adult in a different part of the room, away from the card table, checking the correct retrieval of picture cards.

Materials

- Picture cards of items to be retrieved (p. 97).
 Photocopy the sheets several times so that there are plenty of items for each child to retrieve (real objects can be used if preferred).
- Numbered word lists (p. 99).
- List of class names.

Name	Number of words repeated	Number of items retrieved	Comments
lan	4	3	Lost information while walking to retrieve treasure.

Bottom of the ocean Evaluation form

Name	Number of words repeated	Number of items retrieved	Comments

Rehearsal Chunking

Method

- 1 Discuss the strategy of rehearsal with the children. Also discuss that when there are lots of numbers to remember, they can be grouped. For instance, five numbers can be remembered as three and then two numbers—76391 can be said as 763–91.
- 2 The task for each child is to remember a series of numbers to key into a calculator.
- 3 Write the numbers on a card, saying each number aloud as an individual entity, with the child watching. For example, 9–1–4; 3–8; 7–0–1–9.
- 4 The child is given the card and asked to remember the number sequence. He has to hold the card with the writing face down.
- 5 The child needs to say the series of numbers, repeat it and then keep repeating it as he walks across the room to the leader who has a calculator.
- 6 When the child reaches the leader he gives her the card and recites the numbers. The leader presses the number sequence into the calculator.

7 The child checks it against his card and, if it is correct, he goes back to the end of the line and chooses a card from the next box. (For example, if he remembered 3 digits correctly, he now goes to 4 digits.) If the child did not get the sequence correct, he chooses another card from the same box. Each child sees how many numbers he can remember. Numbers need to be remembered in the correct order.

Materials

- Calculator.
- Cards on which you write the series of numbers.
- Boxes to store cards according to the number of digits.

Adaptation

- Challenge the children to rehearse the numbers but remember them in reverse order. This is quite a difficult task. For example, 6–9–3 becomes 3–9–6.
- Speed it up.
- Slow it down.

Name	Numbers remembered	Remembered in the correct sequence	Comments
Tim	6	Yes	Chunked numbers.

Press the buttons Evaluation form

Name	Numbers remembered	Remembered in the correct sequence	Comments

Strategy Rehearsal



Method

- 1 Discuss the technique of rehearsal with the group. 'One way you can remember things is to say it over and over, either out aloud or to yourself. If I say *ball*, *brush*, you say ... *ball*, *brush*. If I say *sock*, *fork*, you say ...'
- 2 Objects or pictures are spread over the table.
- 3 A child is asked to retrieve one, two, three or four items. First the teacher says the words then, 'Now *you* say it!' The child is expected to repeat the names of the items several times.
- 4 When the child can competently say the series of items (for example, *book, cup, button*), he retrieves the items and returns them to the table.
- 5 Repeat procedure with next child.

Materials

A variety of common objects or pictures (p. 104). You can put the items in categories or choose a selection of items from each category.

Name	Rehearses Yes/No	Number of items retrieved	Comments
Ricci	Yes	4	Looked at items as he said them, found easily.

Now you say it Evaluation form

Name	Rehearses Yes/No	Number of items retrieved	Comments

Rehearsal Visualisation



Method

- 1 Set the scene that the children are witches and they are making a magic spell.
- 2 Show the children the picture cards with the choice of ingredients to go into the cauldron.
- 3 Children choose ingredients they wish to use and then repeat them over and over, so they can repeat the 'magic recipe' to make the spell work.
- 4 Encourage the children to make a 'picture in their head' to aid their short-term auditory memory. It may help if they close their eyes.
- 5 Remove the picture cards.
- 6 With success, increase the number of ingredients to remember for each child.

Materials

- A witch's 'cauldron' (such as a large plastic bowl).
- Cards to go into the cauldron (p. 108) or use small toys, for example, plastic insects.

Name	Number of ingredients repeated	Says he can see the ingredients in the picture in his head	Comments
Hannah	5	Yes	Said insects were in a line.

Special spell Evaluation form

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Name	Number of ingredients repeated	Says he can see the ingredients in the picture in his head	Comments

Rehearsal



Method

- 1 The leader tells the children that they are going to have a pretend picnic and each child needs to collect the things they will need. Show the children the picture cards and check familiarity with vocabulary.
- 2 Leader tells them, 'When you are given a card, practise saying the things you need to find. You will need to say the words over and over until you remember.'
- 3 Each child is given a card with a list of words and told what the words are. The child says the words over three times then gives the card back to the leader and goes to collect the items.
- 4 When the child returns with the items, the adult checks the card and notes whether they are correct.
- 5 At the end, the group pretends to have a picnic.

Materials

- Picture cards (p. 109)—several copies of each (can be replaced with real objects).
- Word list cards (p. 110).

Name	Able to rehearse	Number of items remembered	Comments
Pamela	✓	3—√ 4—forgot one	Enjoyed. Do again.

Make a picnic Evaluation form

Name	Able to rehearse	Number of items remembered	Comments

Rehearsal



Method

- 1 Set the scene that the children will pretend they are castle servants and the cook is sending them to get the ingredients for a very important meal being prepared for the king/queen.
- 2 Nominate a place in the classroom as the kitchen and another place as the pantry or storeroom. One child needs to be the cook and another takes on the role of the storekeeper.
- 3 Each servant needs to go to see the cook in the kitchen. The cook gives each servant a list of ingredients required from the storekeeper. The servant repeats the ingredients over and over until they feel confident they can request the items from the storekeeper in the pantry.
- 4 The servant practises the list and when he is ready he goes to the storekeeper, passes the list to the storekeeper and recites the ingredients. The storekeeper checks that the servant has recited the list correctly.
- 5 The child goes back to the cook for another list. Either give them the same number of items if they need more practice, or extend the number of items to recall.

6 The adult needs to give the appropriate list to the cook and may need to assist the storekeeper in checking the items.

Materials

Lists of ingredients (p. 113). Photocopy the pages and cut them to make cards.

Name	Number of ingredients recalled	Comments
Serena	3—√ 4—remembered last item only	Shut eyes to remember— try visualisation activity next.

Royal recipes Evaluation form

Name	Number of ingredients recalled	Comments

Rehearsal Visualisation

Method

Activity a—shapes

- 1 Each child is given a large piece of paper, access to paste and a brush, and a set of coloured shapes.
- 2 The leader says a colour and shape (for example, *red triangle*). The children repeat the words, then try to picture the shape in their heads.
- 3 'Hold that picture in your head. Now find that shape.'
- 4 The children paste the coloured shape onto the sheet of paper.
- 5 Gradually increase the number of coloured shapes the children need to paste on.

Activity b—pictures

- 1 Each child is given a blank sheet of paper, access to paste and a brush, and a set of pictures.
- 2 The leader asks the children to find a particular picture, then gives an instruction about where to place the picture, for example, 'Put the house in the middle of the page'.
- 3 The children repeat the instruction and visualise the house in the middle of the page. They paste the picture onto the page.
- 4 Increase the length of the instructions, for example, 'Put the plane in the sky and the bird in the tree'.

Suggestions for placement

above	below	under
in	next to	between
in the middle	to the right of	to the left of
near	close to	far away from

Materials

Activity a—shapes

- A selection of shapes cut from coloured paper (for example, circle, square, triangle, star, cross).
- A large sheet of paper for each child.
- Paste and brushes.

Activity b—pictures

- Cut-out picture shapes (for example, house, tree, sun, aeroplane, person, bird, cat, seat).
- Blank sheets of paper.
- Paste and brushes.

Name	Number of elements in instructions followed	Comments
Christian	3—cat, on, seat	Did not know 'between'—teach concept in class.

Colour shape pasting Evaluation form

Name	Number of elements in instructions followed	Comments

Strategy Re

Rehearsal

Method

- 1 Role-play a child who is having a birthday party and needs to ring his friends to invite them. Either role-play this with another adult or using two hand puppets. Explain that the children will have turns at being the birthday child, as well as the child being invited to the party.
- 2 Discuss what information would be needed so a child would have enough information to attend the party. Emphasise the importance of remembering the details.
- 3 The leader tells the first child the details of the party (for example, *Saturday, 5 o'clock at the bowling alley*). The child is encouraged to rehearse the details until he feels he can remember it.
- 4 The first child rings another child and invites him to the party.

List of party details

- 1 Saturday, 4 o'clock at the park.
- 2 Sunday, 5 o'clock at a restaurant.
- 3 Friday, 7 o'clock at the movies.
- 4 Saturday, 10 o'clock at the ice-skating rink.
- 5 Tuesday, 2 o'clock at the zoo.
- 6 Saturday, 6 o'clock at my place.
- 7 Wednesday, 4 o'clock at the bowling alley.

Materials

Toy telephones.

Adaptation

- Instruct the child receiving the invitation to write the party details down to help him remember.
- The invited child asks a 'parent' for permission to attend and has to pass the details on to the 'parent'.

Name	Correct information for day	Correct information for time	Correct information for place	Comments
David	Confused day	✓	✓	? knows days of the week—check.

Party invitation Evaluation form

Name	Correct information for day	Correct information for time	Correct information for place	Comments

Strategy Rel

Rehearsal



Method

- 1 Explain to the group that they are going to look at some tricky pictures and they will need to find the right one that shows all the features requested (for example, *big mouse on the stripy box*). Talk about how we remember instructions. Useful points to discuss are given below.
 - Look carefully at the pictures before the instruction is given.
 - Rehearsal—repeat the instruction over either quietly or in their heads.
 - Matching—relate the instruction to the pictures, to see which fits best.
- 2 Lay out four pictures on the table.
- 3 Each child in the group is given an instruction and asked to find the correct picture from the four on the table.
- 4 With each round, increase the number of elements that the child needs to remember.

Materials

- Cards (p. 117).
- List of Instructions (p. 119).

Name	Number of elements in instructions followed	Comments
Peter	3—cat, on, table	? slow processing skills— but tried hard and had success

Tricky pictures Evaluation form

Name	Number of elements in instructions followed	Comments

Rehearsal

Method

- 1 Divide children into teams of four or five and appoint a leader to each.
- 2 Put masking tape markers on the floor for each leader to stand behind. Ask the children to form a line behind their leader.
- 3 Explain the task:

You will say three sounds (for example, d-o-m) and the team leaders will have to repeat the three sounds in the correct sequence. When they have done it accurately you say 'Go', then the leaders run to touch the wall, run back and repeat the three sounds, then they go to the back of the line.

- 4 Say three sounds that make up a consonant-vowel-consonant pattern. Wait for each leader to repeat the series of three sounds. Say 'Go!' Listen to them repeat the series of sounds again when they return. Monitor that they go to the end of the line so there are new children in the leader position.
- 5 Repeat the process so that all children have a turn.

Take note of the children who have difficulty producing individual sounds or sequencing them correctly, as they are at risk for literacy difficulties.

Materials

Masking tape.

Name	Number of sounds repeated	Can retain briefly and then repeat	Comments
James	Yes	No	Only remembered first sound after few seconds break.

Sound memory race Evaluation form

Name	Number of sounds repeated	Can retain briefly and then repeat	Comments

Strategy Visualisation

Method

- 1 Explain to the children: 'We're going to look at something special and talk about what it looks like. Then we'll cover it up, and try to remember what it looked like.'
- 2 Introduce the first object and encourage the children to produce words that describe its appearance. Offer choices, for example, 'Is it big or small?'; 'What colour is the tail?'; 'What shape is the roof?'; 'What is it made out of?'. Think about the colour, size, shape and parts of the object.
- 3 Cover the item with the cloth and ask the children to recall what it looked like. Remove the cloth to check details if necessary.

Materials

 A number of common objects to practise visualising. Initially, use visually simple items without too many different parts or colours. Increase the amount of detail as skills develop.

Suggestions for objects to use:

Simple—blue rubber ball, a red block, a green hair ribbon, a white plate.

More detailed—a toy car, a doll, a toy animal, a toy human plastic figure.

A cloth to cover the items.

Adaptation

In this game the children need to find an item described by one of their peers.

- Discuss the objects.
- Cover the objects.
- One child describes an object.
- Remove the cover and the other children find it.

Name	Able to offer appropriate descriptive words, for example:	Able to verbally recall some visual attributes	Comments
Serena	Big, red, round	1	Vocabulary poor due to ESL issues. Used gesture.

Name	Able to offer appropriate descriptive words, for example:	Able to verbally recall some visual attributes	Comments

Visualisation

Method

- 1 Children are asked to think about what a particular object looks like (for example, 'I want you to think about what your car looks like'.)
- 2 Each child is asked to describe the colour of the thing they can 'see in their head'.
 - 'Tell me what colour your car is.' We cannot know for sure if a child is making visual images; however, sometimes the things they say can guide us.
- 3 Ask for further details, for example, size, shape, special features and so on.

Materials

Nil.

List of objects

- 1 Your dog/cat/fish/bird/rabbit/other pets (or favourite animal)
- 2 Your teddy or special soft toy
- 3 Your gumboots
- 4 Your family car/favourite car
- 5 Your pyjamas
- 6 School bag
- 7 A fire engine
- 8 A police car
- 9 A traffic light
- 10 Your bike

Name	What child says	Comments
Nicholas	My dad's car is red. It is a 4-wheel drive and has a white pattern on the side	Did well.

Colour it in Evaluation form

Date:

Name	What child says	Comments

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Visualisation



Method

Activity a—the car

- 1 Tell the children that they are going to make a picture of a car in their heads. This will help them to remember how to make the car later.
- 2 Show them the outline of the car.
- 3 'Let's make it a blue car—close your eyes and make a picture of a blue car—have you got it?'
- 4 'Now let's make the wheels yellow. Close your eyes and put yellow wheels on your blue car.'
- 5 'I'm closing my eyes. I can see a blue car with yellow wheels. What can you see?'
- 6 'Keep that picture in your head.'
- 7 'Now use that picture to help make your car with paper.'

Use a similar format for activities b and c:

- 1 Tell children we are going to try to make a picture of a house in our heads. Then we are going to make it with paper.
- 2 Show them the outline and say, 'It might look something like this'.
- 3 'Let's make a red house with a yellow roof. Close your eyes and make the house red and the roof yellow. Have you got it?'
- 4 'Now put on a blue door and a yellow window.'

- 5 'Now we've got a red house with a yellow roof. It's got a blue door and a yellow window.'
- 6 'Keep that picture in your head. Now let's make it on the paper.'
- 7 Children choose appropriate shapes to recreate the house.

Materials

(see pp. 120-122)

Activity a—the car

- An outline drawing of a car.
- Coloured-in cut-outs of the car and wheels.

Activity b—the house

- Outline drawing of a house.
- Coloured-in cut-outs of a house, roof, door and window.

Activity c—winter's day

- Outline of a person wearing a coat, hat and gumboots.
- Coloured-in cut-outs of coat, hat and gumboots.

Name	Child says they can see picture in their head Yes/No	Recreates object	Comments
Luca	Yes	3 items—✓	Encourage Luca to continue to 4 items—forgot one, asked to seek clarification.

I see a picture Evaluation form

Name	Child says they can see picture in their head Yes/No	Recreates object	Comments

Strategy \

Visualisation



Method

- 1 Leader explains that as a group we will make a special picture of a teddy in the park—we will all add an important bit.
- 2 Start with the basic teddy outline on a large piece of paper or cardboard. Each child then chooses one item to add to the picture and pastes it on or attaches it so that the group creates a simple picture.
- 3 The leader tells the children to look at the picture carefully because she's going to remove it—it won't be on the board, it will be in their heads.
- 4 Leader removes the picture and then encourages the group to use the picture in their heads to describe teddy.
- 5 Increase the number of items each child has to recall to place on teddy.

Materials

- Paste and brushes or an adhesive substance such as Blu Tack.
- Picture outlines, p. 123.

Name	Number of items recalled	Comments
Wendy	Able to recall 2 items on teddy	Do 3 items next time—give each child their own teddy.

Hold the picture in your head Evaluation form

Comments

Visualisation Rehearsal



Method

- 1 Explain to the children that sometimes we have to remember things even when we can no longer see them. We can look carefully at things to help us remember them. We can make pictures in our head to help us remember.
- 2 Lay out the objects on the table. Name one of the items and encourage the children to discuss what it looks like. Repeat for the other objects.
- 3 Name two objects. Children take turns to repeat the words and then find the appropriate things.
- 4 Move the objects to a distant table.
- 5 The leader names one object. Children take turns to make a picture in their head, repeat the word and then go to the distant table to find it.
- 6 With success, increase the number of items to be retrieved.
- 7 Discuss with the children how they could remember things that they could not see.

Materials

Range of common objects or pictures (p. 104).

Name	Number of words repeated	Number found with visual clues	Number retrieved without visual clues	Comments
James	3	3	2	Helped by visual clues.

Here and there Evaluation form

Name	Number of words repeated	Number found with visual clues	Number retrieved without visual clues	Comments

Visualisation



Method

- 1 Discuss the technique of visualisation with the group. Visualisation is making a picture in our head of the thing or things that we want to remember. It is like painting a picture, and we need to think about how the things go together in the picture in our head.
- 2 Set the scene of an underwater cave that we want to enter—but in order to gain entry we need to recite a password. Explain that we will use 'visualisation' to remember our passwords.
- 3 Before the children dive down to the cave, they are each given a 'password'—a list of words.

 Consult the numbered word lists (p. 125) and choose the number of words based on your knowledge of the child's short-term auditory memory capacity.

Mark the list number next to the child's name so it can be checked when the child reaches the cave.

- 4 In order to remember the password (for example, necklace–treasure chest–fish), the child is asked to 'make a little story' with the words, and to picture the story in their head (for example, 'In my picture I see a necklace lying in a treasure chest. There is a fish swimming past.').
- 5 The child is asked to think about the picture to remember the password as they dive down to the cave.
- 6 When the child reaches the cave, he needs to think about the picture in his head, say the 'little story', then name the key words that make up the password.
- 7 Check the key words recited against the child's set of words. If correct, the child gains entry to the cave.

Materials

- Numbered 'word' lists (p. 125).
- List of class names.

Name and card number	Can make up a 'little story' for password Yes/No	Can describe a picture in head when reaches cave	Can recall key words? Yes/No How many?	Comments
Ellen 4	Yes	1	Yes—4	This seemed a helpful strategy.

Name and card number	Can make up a 'little story' for password Yes/No	Can describe a picture in head when reaches cave	Can recall key words? Yes/No How many?	Comments

Visualisation Key words



Method

1 Read the following story while the children look at the picture of the bottle. Encourage the children to make a picture of the bottle in their heads as you read.

Story

I found this bottle in a junk shop. It is made of glass. It is red with a double blue stripe towards the base. At the bottom of the neck is a beautiful gold chain.

- 2 Discuss key words/phrases, that is, the important information:
 - junk shop
 - rec
 - double blue stripe
 - towards the base
 - bottom of the neck
 - gold chain

3 Ask the children whether the following statements are true or false:

а	The bottle is made from plastic	Т	F
b	The double stripe is at the base	Т	F
C	I found the bottle in a junk shop	Т	F
d	The double stripe is blue	Τ	F

- 4 Instruct the children to:
 - Colour in the bottle as accurately as they can.
 - Describe the bottle.

Materials

- Outlines of the shape of a bottle, one for each child (p. 129).
- Coloured pencils.

Name	Answers true/ false questions correctly	Description was accurate Yes/No	Comments
Susan	4/5	Forgot where bottle found.	Use activity again but change story.

Bottle memory Evaluation form

Name	Answers true/ false questions correctly	Description was accurate Yes/No	Comments

Strategy Linking

Method

- 1 The group sits in a circle on the floor and the leader talks about the food she likes, then explains that different people prefer different foods. Explain that linking ideas helps us remember information.
- 2 'We're going to try to remember what foods we all like'
- 3 The leader holds a food bowl and says, 'My name is ... and I like'
- 4 The leader passes the bowl on to the next person who says, 'My name is ... and I like'
- 5 Then the whole group says, 'His name is ... and he likes Her name is ... and she likes'
- 6 Go round the circle and as each person gives their name and preferred food, go back and review the names and foods that have been said.

Materials

Food bowl.

Adaptation

- Go around the circle and each child says his name and describes something he is wearing, for example, 'My name is James and I'm wearing a red T-shirt'. The detail of the description can vary with the child's ability.
 - After each child gives a description, repeat it and then go back around the circle reviewing what each previous child has said.
- As above, but each child says his name and notes his favourite animal, for example, 'My name is Alistair and my favourite animal is a tiger'.

Name	Says name	Says food	Remembers some other names and foods	Comments
Fiona	1	Repeated item given by previous child	Remembers name not food	? Poor vocabulary.

The name game Evaluation form

Name	Says name	Says food	Remembers some other names and foods	Comments

Activity 27 Word chain – things that belong together

Strategy Linking

Method

- 1 The children sit in a circle. Discuss how a chain is made from links holding on to each other.
- 2 'We are going to make a chain. To link up to a person we need to say a word that links up with that person's word. The words can link by being in the same category.'
- 3 The teacher says a category name and gives a word that belongs to that category, for example 'Clothes—pants'.
- 4 The first child says another word in the same category, then links hands with the teacher.
- 5 Continue around the circle until all hands are linked.
- 6 If appropriate, children can have turns to choose the category.

Materials

Nil.

Adaptation

Suggestions for categories are given below. The teacher will think of many more and may choose to relate them to curriculum topics.

GROUP SIZE: WHOLE CLASS

Clothes Boys' names
Food Girls' names
Animals Sports
Furniture Body parts
Drinks Toys
TV programs Games

Name	Able to think of a word in a given category Yes/No	Comments
Marco	Yes	Enjoyed this game.

Name	Able to think of a word in a given category Yes/No	Comments

Strategy Clarification

Method

- 1 This is a role-play which two adults perform while the children watch, then it is discussed with the whole group.
- 2 There are two characters—Andrew and Brendan. The theme is that Andrew gives Brendan too much information, and Brendan needs to ask for clarification.

Andrew: Hi Brendan. What are you doing?

Brendan: Not much. What are you doing?

Andrew: I'm going to the museum. I am going to catch the bus. Do you want to come?

Brendan: Sure. What should I bring?

Andrew: Well, you will need money for the bus, your hat and coat because it's cold, and a drink and a sandwich, and probably a biscuit, and bring some bread so we can feed the ducks when we get there. OK?

Brendan: Um. Sure (looking worried), um maybe I won't go.

3 Replay the role-play but change the ending. In this version Brendan says to Andrew:

Brendan: Um. I can't remember everything you said to bring. Can you tell me again?

Andrew: Sure I can. I'll help you to get everything together. Let's go.

Brendan: Great. This will be fun.

Discussion points

- How do you think Brendan felt when he couldn't remember everything Andrew said?
- Do you think Andrew minded repeating things for Brendan?
- How could Andrew have said things differently the first time so Brendan could remember?

Materials

If there are not two adults to role-play this activity, one adult could do it with two hand puppets.

Name	Participated in discussion Yes/No	Comments	
Darcy	Yes	Gave constructive ideas about how Andrew could present information to Brendan.	

Can you help me? Evaluation form

Name	Participated in discussion Yes/No	Comments

Strategy Counting items

Method

1 Explain to the children that it helps us to remember if we know how many things we need to recall. A useful way of doing this is to count items off on our fingers.

- 2 Set the scene. 'We are going to the moon and the rocket "blasts off" at a special number. Our first number will be three. Everybody crouches to the floor in a circle. We count off to three on our fingers and when we get to three we "blast off".' (jump into the air).
- 3 The leader chooses a number under 10 as the 'blast off' signal and the children count off the numbers, in turn, on their fingers and 'blast off' at this number.
- 4 The children can have turns at choosing a 'blast off' number for the rest of the group.

Materials

Nil.

Name	Able to 'blast off' at a specified number Yes/No	Comments
Nadira	Yes	Counted numbers off on her fingers.

Date:

Countdown Evaluation form

Name	Able to 'blast off' at a specified number Yes/No	Comments

Counting items Rehearsal



Method

- 1 Children sit in a circle and the picture cards are placed facing upwards in the centre of the circle (in a hoop if desired).
- 2 One child is selected as the 'finder' and another is selected as the 'runner'.
- 3 The teacher says how many pictures she will name ('I'm going to say two words'). She asks the 'finder' to close his eyes and then names two pictures (for example, 'ball-house'). The 'finder' needs to repeat the two words twice while he checks them off on his fingers. When he has done this successfully the leader says 'Go!'
- 4 The 'runner' then runs around behind the circle of children and the 'finder' opens his eyes and attempts to find the pictures. The runner keeps running until the leader calls 'Stop!' when all the pictures are found.
- 5 With success, increase the number of items up to the child's short-term auditory memory capacity.

Materials

- Pictures of common objects (p. 104).
- Hoop for pictures (optional).

Adaptation

The task can be made easier by the first child keeping his eyes open to make use of visual cues as the pictures are named.

Name	Number of words repeated	Number of pictures found	Counts items correctly on fingers Yes/No	Comments
Ben	3	2	Yes	Easily distracted by movement.

Remember and run Evaluation form

Name	Number of words repeated	Number of pictures found	Counts items correctly on fingers Yes/No	Comments

Key words Clarification Counting items

Method

1 The aim of this activity is for children to listen to a sentence, to identify the key words and remember the sentence. Explain that often when people tell us information there are key words or important points to remember. Let's listen to this sentence and work out what the key words are:

It's time to pack your bag, clean your teeth and go to bed.

The key words are: pack your <u>bag</u>, clean your <u>teeth</u> and go to <u>bed</u>.

2 Give the child a sentence beginning with one key word and work up to their short-term auditory memory capacity.

- 3 Ask the child to identify the key words.
- 4 Ask him to recall the sentence.
- 5 Encourage the child to use clarification if he cannot remember the whole message.
- 6 Cue the child in if he is having difficulty with recall. For example 'I hurt my ...'.

Materials

Below is a list of sentences. Each set is graded into one to five key words. The key words are underlined.

Sentences

I hurt my arm.

I hurt my arm and wrist.

I hurt my arm, wrist and finger.

I hurt my arm, wrist, finger and hand.

I hurt my arm, wrist, finger, hand and leg.

At the movies I ate popcorn.

At the movies I ate popcorn and lollies.

At the movies I ate popcorn, lollies and cake.

At the movies I ate popcorn, lollies, cake and an icecream.

At the movies I ate popcorn, lollies, cake, an icecream and an apple.

In the sky you can see the sun.

In the sky you can see the <u>sun</u> and the <u>moon</u>.

In the sky you can see the <u>sun</u>, <u>moon</u> and <u>stars</u>.

In the sky you can see the <u>sun</u>, <u>moon</u>, <u>stars</u> and <u>clouds</u>.

In the sky you can see the sun, moon, stars, clouds and birds.

I like to eat bananas.

I like to eat bananas and cherries.

I like to eat bananas, cherries and grapes. I like to eat bananas, cherries, grapes and watermelon.

I like to eat <u>bananas</u>, <u>cherries</u>, <u>grapes</u>, <u>watermelon</u> and <u>strawberries</u>.

I can hop.

I can hop and skip.

I can hop, skip and jump.

I can hop, skip, jump and run.

I can <u>hop</u>, <u>skip</u>, <u>jump</u>, <u>run</u> and <u>walk</u>.

At the zoo I saw a tiger.

At the zoo I saw a tiger and a monkey.

At the zoo I saw a tiger, monkey and a giraffe.

At the zoo I saw a tiger, monkey, giraffe and a zebra.

At the zoo I saw a tiger, monkey, giraffe, zebra and a platypus.

My mum likes to drink water.

My mum likes to drink water and orange juice.

My mum likes to drink water, orange juice and coffee.

My mum likes to drink water, orange juice, coffee and tea.

My mum likes to drink water, orange juice, coffee, tea and milk.

My favourite cars are blue.

My favourite cars are blue and red.

My favourite cars are blue, red and white.

My favourite cars are blue, red, white and gold.

My favourite cars are <u>blue</u>, <u>red</u>, <u>white</u>, <u>gold</u> and <u>black</u>.

The shape is a triangle.

The shapes are a triangle and a square.

The shapes are a triangle, square and a diamond.

The shapes are a triangle, square, diamond and rectangle.

The shapes are a triangle, square, diamond, rectangle and a circle.

On sandwiches I like ham.

On sandwiches I like <u>ham</u> and <u>tomato</u>.

On sandwiches I like <u>ham</u>, <u>tomato</u> and <u>cheese</u>.

On sandwiches I like <u>ham</u>, <u>tomato</u>, <u>cheese</u> and <u>pickles</u>.

On sandwiches I like <u>ham</u>, <u>tomato</u>, <u>cheese</u>, <u>pickles</u> and <u>lettuce</u>.

My hobby is painting.

My hobbies are painting and reading.

My hobbies are painting, reading and knitting.

My hobbies are <u>painting</u>, <u>reading</u>, <u>knitting</u> and <u>cooking</u>.

My hobbies are painting, reading, knitting, cooking and gardening.

On my holiday I went to <u>Japan</u>.

On my holiday I went to <u>Japan</u> and <u>Africa</u>.

On my holiday I went to Japan, Africa and Spain.

On my holiday I went to <u>Japan</u>, <u>Africa</u>, <u>Spain</u> and <u>New Zealand</u>.

On my holiday I went to <u>Japan</u>, <u>Africa</u>, <u>Spain</u>, <u>New Zealand</u> and <u>China</u>.

In my jewellery box I have a ring.

In my jewellery box I have a ring and a bracelet.

In my jewellery box I have a <u>ring</u>, <u>bracelet</u> and a <u>necklace</u>.

In my jewellery box I have a <u>ring</u>, <u>bracelet</u>, <u>necklace</u> and a <u>brooch</u>.

In my jewellery box I have a <u>ring</u>, <u>bracelet</u>, <u>necklace</u>, <u>brooch</u> and <u>earrings</u>.

In the band I heard a clarinet.

In the band I heard a <u>clarinet</u> and <u>drums</u>.

In the band I heard a <u>clarinet</u>, <u>drums</u> and a <u>trumpet</u>.

In the band I heard a clarinet, drums, trumpet and a piano.

In the band I heard a <u>clarinet</u>, <u>drums</u>, <u>trumpet</u>, <u>piano</u> and a <u>flute</u>.

Name	Number of key words identified	Counts key words Yes/No	Retells information correctly Yes/No	Comments
Zac	3	Yes	Yes	Asked for clarification.

Key words Evaluation form

Name	Number of key words identified	Counts key words Yes/No	Retells information correctly Yes/No	Comments

Note taking Key words

Method

- 1 Explain to the children that if we write messages down, then we can remember them. 'Do Mum or Dad write a shopping list? This is so they don't forget to buy the bread, milk and eggs. Today we are going to write things down so we can remember too.'
 - Younger children—'I am going to tell you something and I want you to draw a picture to help you remember what to do.'
- 2 It may be helpful to discuss what information is important to write down. For example, words that do not carry meaning can be eliminated and information can be listed.
- 3 After each instruction, check that the children have remembered the items. If not, say the instruction over again and have them add the missing items.

Instructions

- Go to the shops and get a banana and two apples.
- Bring your towel, bathers and goggles for swimming.
- Bring a teddy bear for the picnic.
- This afternoon we have art and sport.
- I need to bring my shoes, jumper and a hat.
- Tell Mum that Dad will be late home tonight.

Materials

- Pens/pencils
- Paper

Adaptation

The children can make up an instruction for their peers to write down.

Name	Able to represent the instruction	Comments
Meseret	Yes	Memory helped by drawing the items.

Write it down Evaluation form Date:

Name	Able to represent the instruction	Comments

Activity 33 Things that help you remember

GROUP SIZE: WHOLE CLASS

Strategy

Exploration of memory



Method

- 1 Explain to the children that we are going to think about things that might help us to remember what we are told. Tell them that you have some ideas written on cards and you want them to decide as a group which ones are helpful and which ones are not.
- 2 Put out the happy and sad faces cards (or make tick and cross cards). Read the first strategy and as a group decide if this is a helpful strategy (happy) or not (sad).
- 3 Work through all of the cards, then at the end review the helpful strategies.

Materials

- Idea cards (p. 130).
- Happy and sad face cards (p. 131).

Name	Able to identify memory strategies	Comments
Hossan	Yes	Said that concentrating was the best way to help him to remember.

Things that help you remember Evaluation form Date:

Name	Able to identify memory strategies	Comments

Section 3

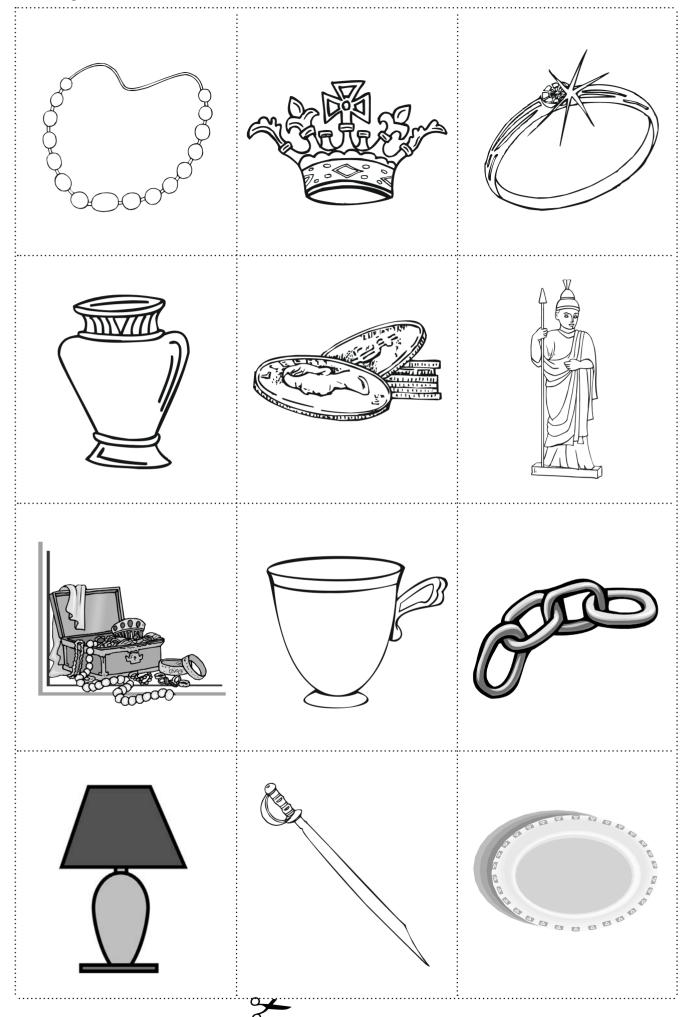
black line master support materials



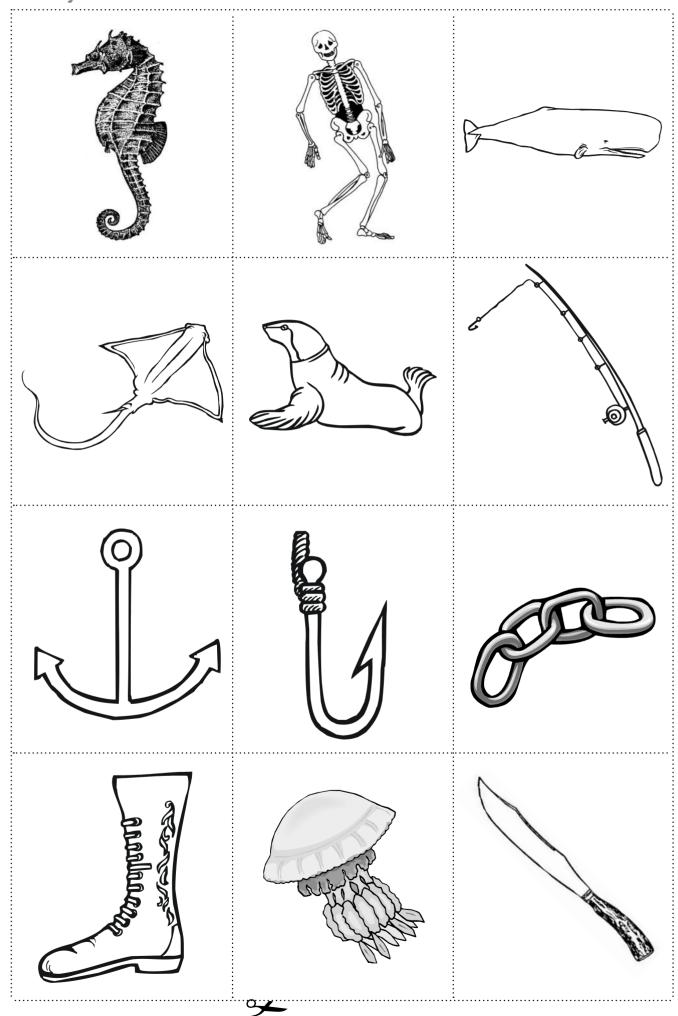
activity picture and word cards

Instructions for each activity can be photocopied and laminated as cards to be used at 'work stations' in group situations.

Activity no.	Activity	Support material
8	Get the loot	p. 96
9	Bottom of the ocean	p. 97
11	Now <i>you</i> say it	p. 104
12	Special spell	p. 108
13	Make a picnic	p. 109
14	Royal recipes	p. 113
17	Tricky pictures	p. 117
21	I see a picture	p. 120
22	Hold the picture in your head	p. 123
23	Here and there	p. 104
24	The underwater cave	p. 125
25	Bottle memory	p. 129
30	Remember and run	p. 104
33	Things that help you remember	p. 130







Activity 9

1 fish hook	eel chain
³ jellyfish shark	shell coin
rock	starfish
bottle	vase
octopus	turtle
crab	seahorse
whale	fishing-rod
seal	knife
boot	shark
fish	whale

Activity 9

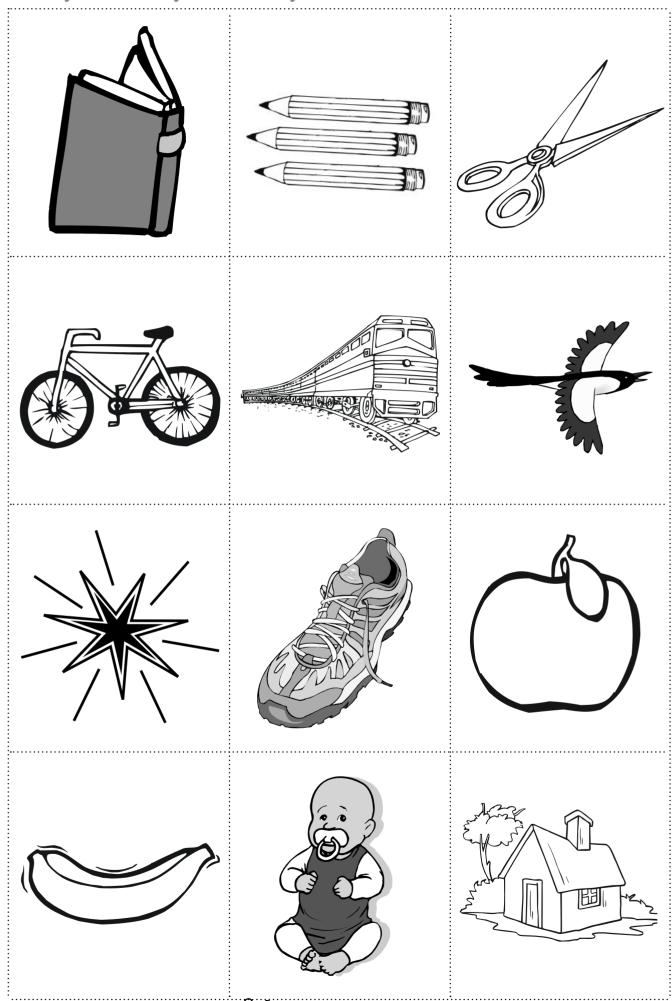
hook	crab
turtle	vase
coin boot	turtle whale seal
fish	chain
vase	shell
hook	starfish
coin	fish
eel	rock
boot	bottle
fishing-rod	vase
skeleton	coin
octopus	shell
bottle	rock
jellyfish	whale
crab	fishing-rod

Activity 9

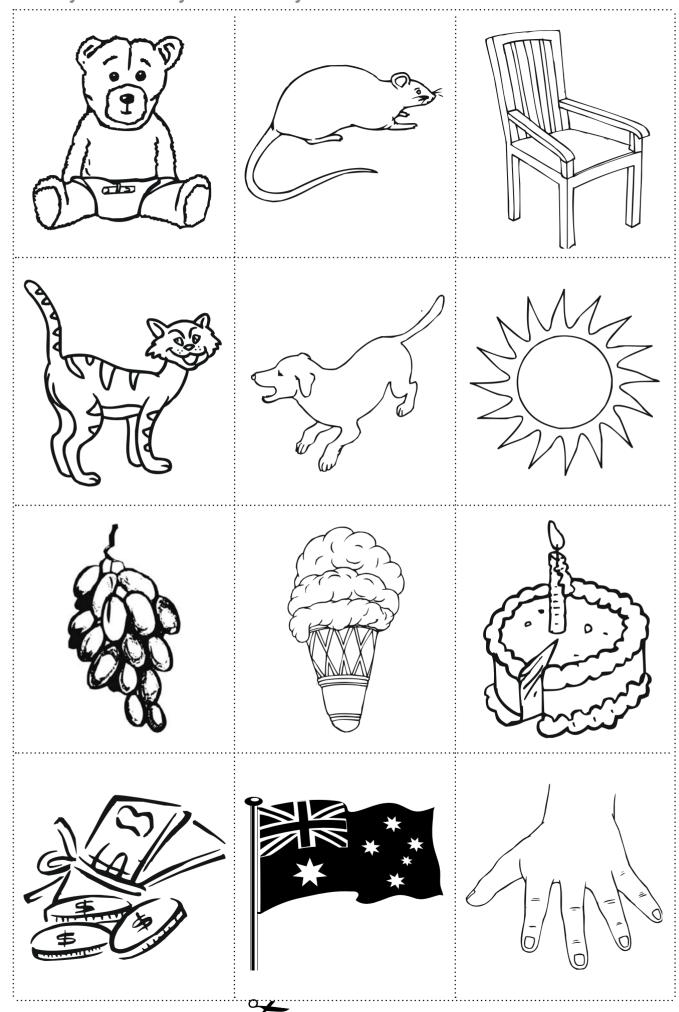
seal	chain
shell	coin
seahorse	crab
fish	coin
shark	knife
bottle	seal
crab	skeleton
vase	coin
turtle	whale
fish	jellyfish
turtle	rock
crab	octopus
vase	shark
bottle	shell
chain	coin
starfish	eel
hook	seahorse
skeleton	seal
whale	fishing-rod
knife	boot
stingray	fish

fish	shell
vase	turtle
octopus	jellyfish
chain	shark
starfish	bottle
coin	hook
crab	eel
rock	seahorse
knife	boot
fishing-rod	whale
skeleton	seal
stingray	fish
turtle	eel
shell	vase
crab	hook
coin	jellyfish
starfish rock chain bottle	46 fish vase octopus chain shell
turtle bottle shark rock	⁴⁸ jellyfish starfish hook seahorse stingray

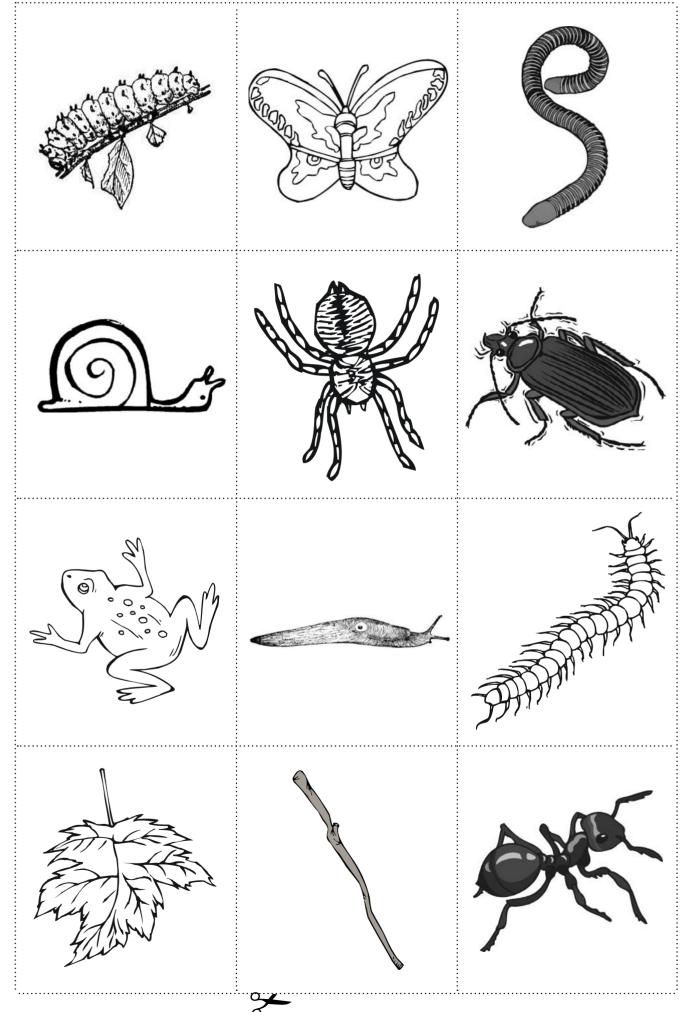
seal fishing-rod knife whale skeleton	vase hook boot starfish skeleton
⁵¹ crab	⁵² fish
shell	anchor
chain	bottle
whale	knife
seahorse	boot
⁵³ turtle	⁵⁴ jellyfish
eel	seahorse
shark	rock
stingray	seal
whale	shark
⁵⁵ rock	octopus
skeleton	whale
octopus	jellyfish
fishing-rod	boot
vase	hook
⁵⁷ shark	⁵⁸ bottle
knife	stingray
vase	crab
eel	coin
chain	eel
seal turtle shell rock	starfish fishing-rod fish hook eel

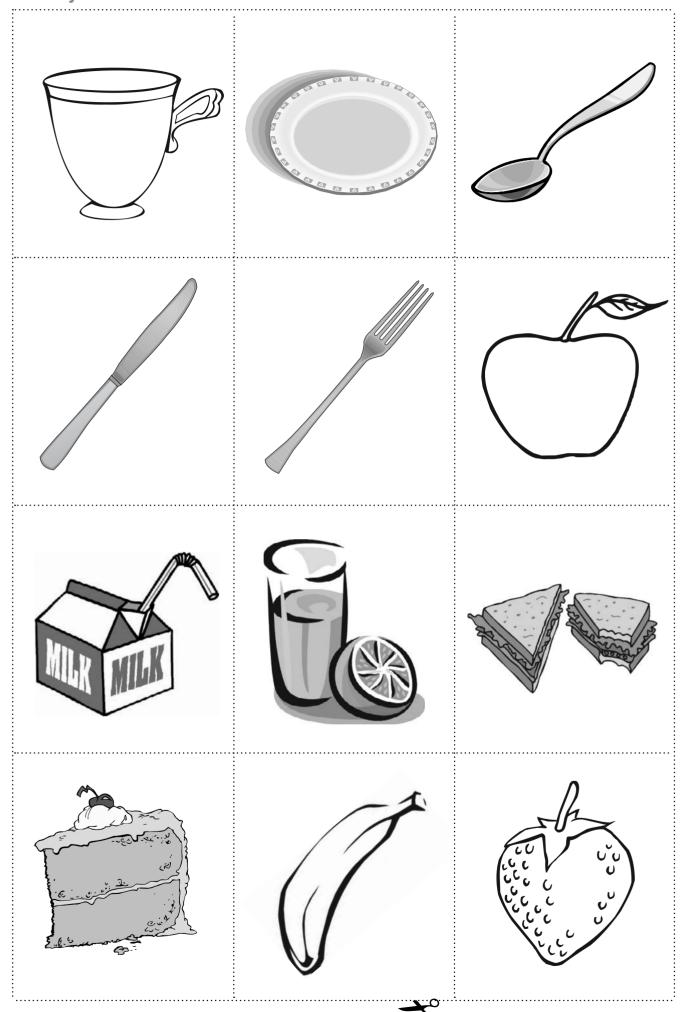












1 plate spoon	spoon knife
³ knife fork	fork plate
₅ spoon apple	apple milk
milk juice	⁸ juice sandwich
sandwich cake	cake spoon cup
fork cake banana	banana strawberry plate

spoon	knife
fork	juice
milk	cup
apple	cup
banana	plate
sandwich	spoon
knife	apple
fork	milk
milk	juice
sandwich	knife
cake	banana
fork	strawberry
cup cake sandwich	apple fork spoon cup
sandwich	knife
milk	cup
cup	banana
spoon	milk

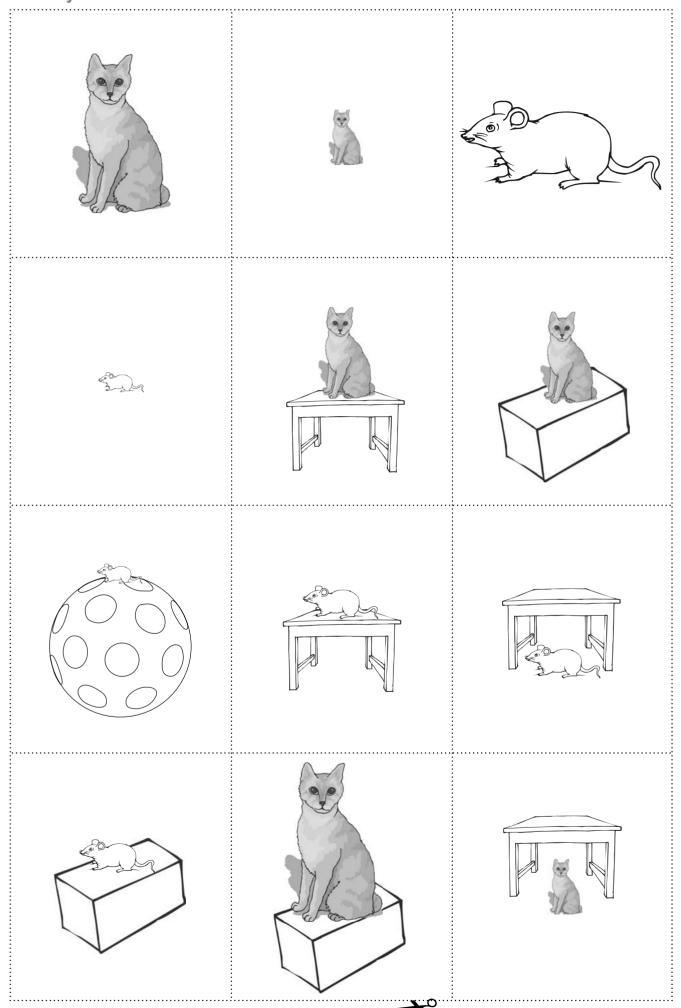
strawberry	cake
fork	sandwich
cup	knife
spoon	cup
spoon	juice
cup	apple
knife	sandwich
strawberry	strawberry
plate	banana
fork	cake
milk	apple
cake	plate
strawberry spoon plate cake juice	³² fork sandwich cup apple cake
33 cup knife milk apple sandwich	spoon cup strawberry cake plate
³⁵ juice	36 cake
banana	spoon
knife	apple
milk	banana
fork	strawberry

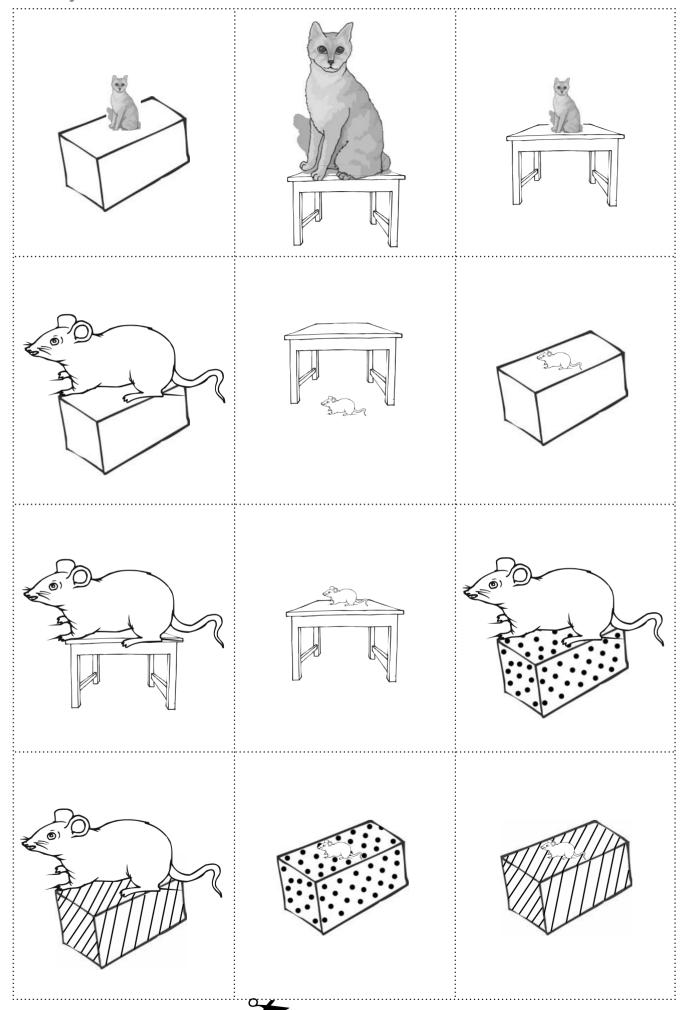
1 cup of flour	² 2 spoons of honey
3 1 cup of milk	⁴ 1 cup of sultanas
⁵ 1 cup of sugar	⁶ 1 cup of grated cheese
7 2 cups of sugar	⁸ 1 spoon of honey
⁹ 2 cups of milk	¹⁰ 2 cups of sultanas
¹¹ 2 cups of grated cheese	1 piece of chocolate

1 mashed banana	1 cup of cocoa
3 cups of sugar	1 cup of butter 1 cup of sugar
1 spoon of sugar	1 cup of milk
1 spoon of flour	1 piece of chocolate
1 cup of cocoa	2 cups of milk
2 cups of sugar	1 cup of cocoa
1 mashed banana	3 pieces of chocolate
2 cups of flour	4 spoons of sugar
1 cup of sultanas	3 cups of sugar
3 eggs	4 pieces of chocolate

3 cups of milk	2 mashed bananas
1 cup of sugar	3 eggs
1 cup of flour	100 grams of butter
2 eggs	1 egg
3 cups of sultanas 2 mashed bananas	of cups of milk
4 cups of sugar	5 pieces of chocolate
3 mashed bananas	2 cups of sultanas
8 spoons of cocoa	1 cup of grated cheese
3 eggs	3 cups of sugar
10 mashed bananas	4 cups of sultanas
8 cups of sugar	5 cups of flour

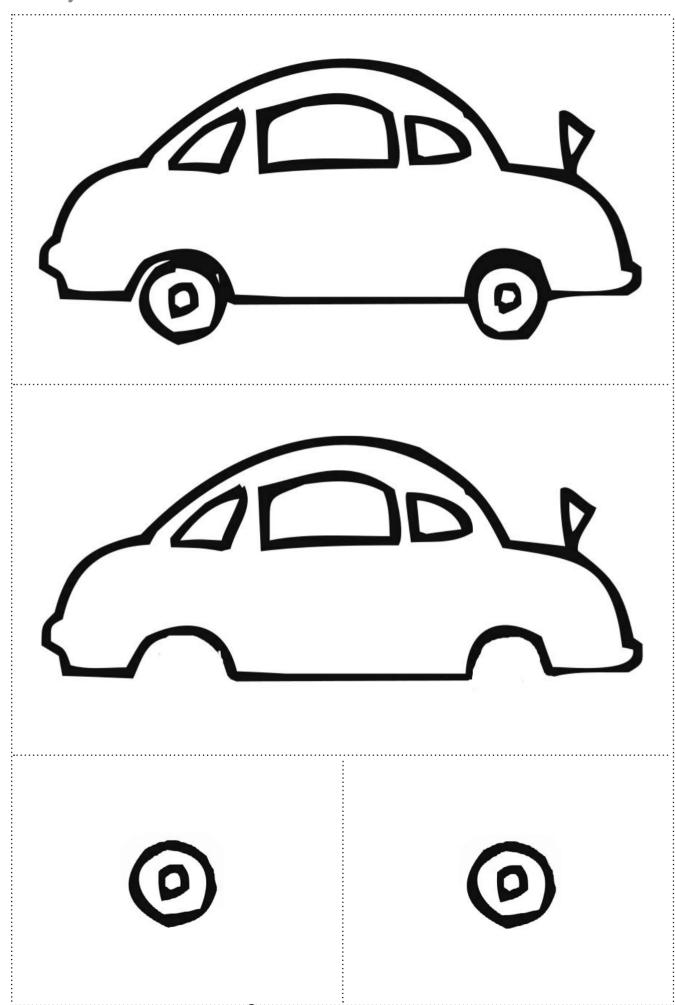
1 cup of flour	4 pieces of chocolate
1 cup of sugar	6 mashed bananas
1 cup of sultanas	2 eggs
3 cups of sultanas	1 cup of grated cheese
4 cups of sugar	1 mashed banana
6 cups of flour	2 eggs
6 pieces of chocolate	4 cups of milk
3 cups of sugar	6 cups of flour
1 cup of butter	7 cups of sugar
1 tomato	3 onions
1 lettuce	5 tomatoes
1 carrot	7 mushrooms
1 lettuce	2 sticks of celery
1 capsicum	3 carrots
3 tomatoes	1 lettuce
10 tomatoes	9 mushrooms
5 sticks of celery	2 lettuces
2 capsicums	4 carrots

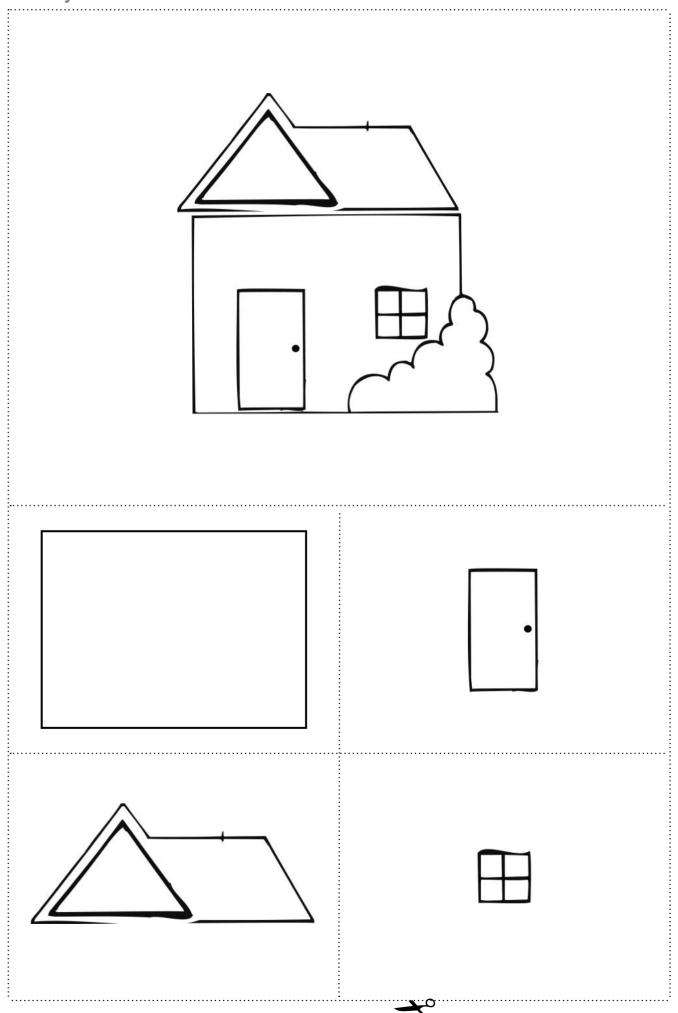


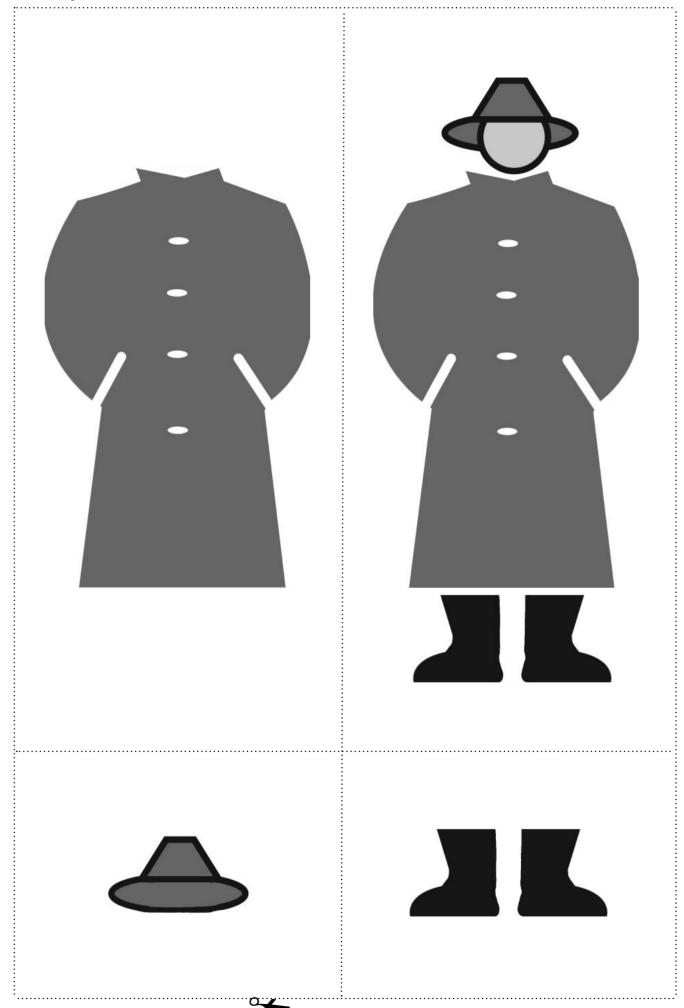


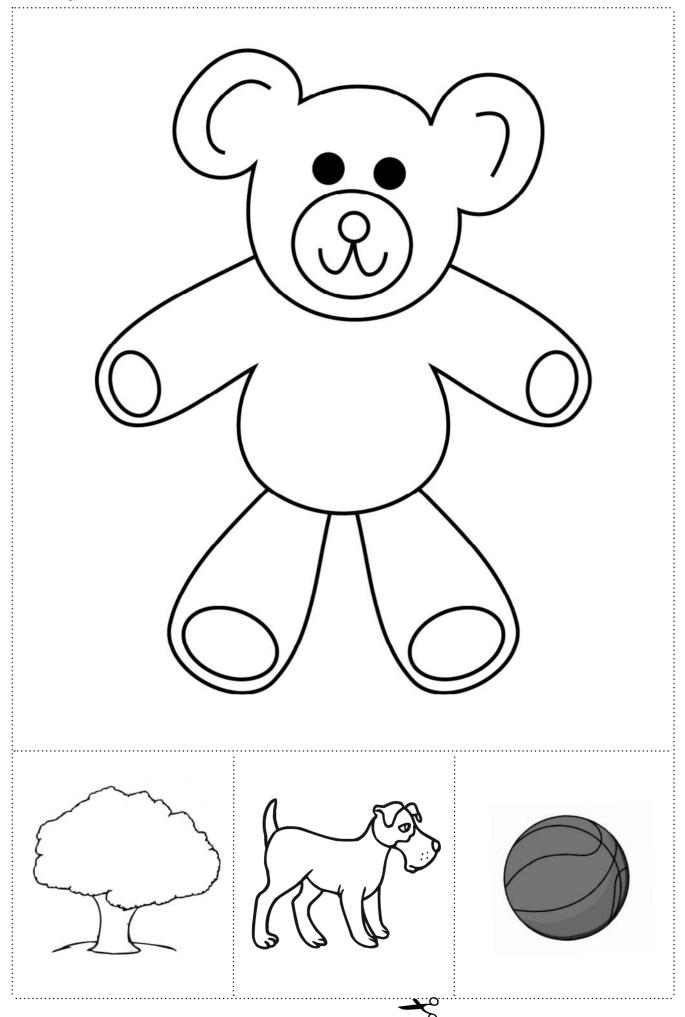
List of Instructions

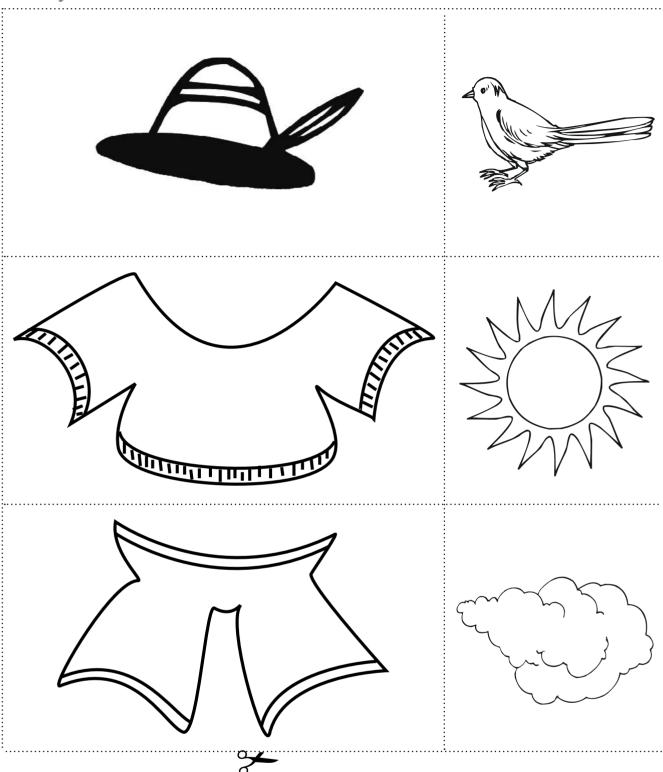
2 ELEMENTS	3 ELEMENTS	4 ELEMENTS
Big cat	Cat on the table	Big cat on the box
Little cat	Cat on the box	Little cat under the table
Big mouse	Mouse on the table	Little cat on the box
Little mouse	Mouse under the table	Big cat on the table
	Mouse on the box	Little cat on the table
		Big mouse on the box
		Little mouse under the table
		Little mouse on the box
		Big mouse on the table
		Little mouse on the table
		Big mouse on the spotty box
		Big mouse on the stripy box
		Little mouse on the spotty ball
		Little mouse on the spotty box
		Little mouse on the stripy box











¹ house	² sun
³	4
tree	boy
⁵	6
dog	Car
⁷ horse	8 flower
9	oat
shark	mouse
bird	hat
cloud	dog

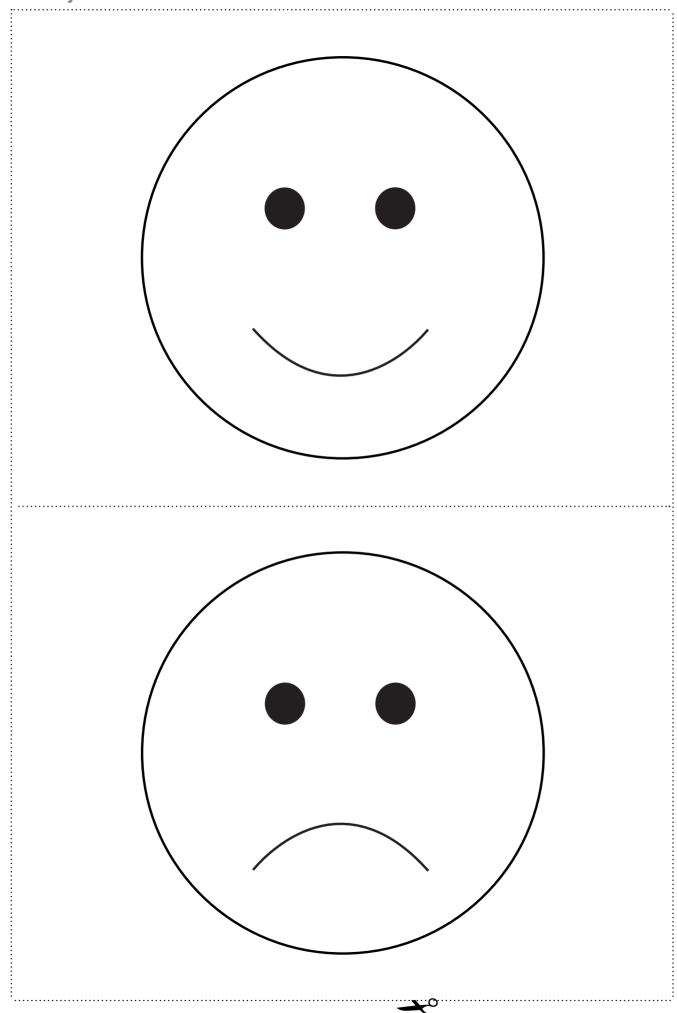
house	clown
frog	star
cow	shoe
chair	bath
baby	spider
ant	stamp
chair	apple
ball	horse
hat	glass
dress	spoon
circle	arum
cat	boat
sun	ruler
mouse	rock
lamp	truck

fence	bath
cloud	rabbit
duck	mat
cake	tree
sock	ball
tap	key
egg	boat
girl	banana
train	fish
shower	soap
pillow	bed
button	feather
box	pie
stick	rug
book	bird
pig	bus
road	bell
puddle	man

worm cup book basket
hose witch fence bottle
plane cloud bucket bed
fire table peg fish
shell sand spade bucket



¹ Stand on one foot	² Concentrate
3 Make a picture in your head	Count the things to be remembered on your fingers
⁵ Ask what was said	Say it over and over
7 Turn music on	8 Watch others to see what they are doing
9 Look out the window	10 Laugh
	······································





reproducible posters

This set of 'posters' can be enlarged and/or copied for display in the class-room. They are designed to reinforce the strategies that we can all use to improve our listening and remembering skills.

It is my responsibility to remember.

Key words rule!

Say it. Say it. Say it. Say it.

Chunk if you can—

it's a good plan.

The Key is to See.

l)on't frown-

write it down.

Ready Set Remember.

ACTIVE LISTENING POSTER

Alert posture

Sit still

Eyes on the speaker

Think about what is being said

Don't interrupt

Wait until the speaker has finished before asking questions

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More valuable resources to support your teaching



Learning and Learning Difficulties A Handbook for Teachers

Peter Westwood ACER Press 2004

This outstanding new teacher resource from bestselling author Peter Westwood explores a variety of learning processes, theories and concepts in order to help educators better understand and distinguish between the causes and outcomes of student learning problems.

Understanding the way in which learning occurs is fundamental to understanding how and when problems in learning may arise. Westwood aims to show that problems in learning are not all due to weaknesses within students or their lack of motivation. Many learning difficulties are created or exacerbated by environmental, not personal, influences. Factors that have an impact on a student's learning environment can be readily modified or improved, whereas weaknesses or 'deficits' within students are not so easily changed.

Two of the most powerful influences in the learning environment are the school curriculum and approaches to teaching. Westwood argues that many learning problems can be prevented or minimised by matching teaching methods and lesson content to a learner's current aptitude and prior experience.

The impact of inappropriate curriculum, insufficient teaching, and persistent failure is discussed, with particular reference to the detrimental effects they can have on a student's affective development and motivation.

Key themes include:

- maintaining students' attention
- $\ensuremath{\blacksquare}$ the importance of explicit teaching and guided practice
- the value of teaching effective task-approach strategies
- If the importance of addressing personal and emotional needs while working toward cognitive and academic goals

Features

- examines different types of learning across the curriculum and the most effective types of teaching to facilitate these types of learning
- I provides practical suggestions for preventing or overcoming common learning difficulties
- identifies factors that contribute to common learning problems in school
- identifies weaknesses or 'deficits' of student learning as the possible outcome of learning failure, not the cause
- $\ensuremath{\blacksquare}$ provides a sound balance of theory and practical strategies for teachers

About the author

With over 45 years experience in education, Peter Westwood has published many articles and books for teachers and for children. Westwood has taught students of all ages from preschool to tertiary, and much of his classroom career was spent teaching students with special educational needs.

After some years serving in the School of Special Education and Disability Studies at Flinders University in South Australia, he is now an Associate Professor in the Faculty of Education at the University of Hong Kong. Westwood lectures in the field of special education to teachers in graduate and postgraduate courses. His research interests include learning difficulties, effective teaching methods, teacher competencies, and curriculum adaptation.

Reading and Learning Difficulties

Approaches to Teaching and Assessment

Peter Westwood ACER Press 2000

This comprehensive guide to teaching reading more effectively presents a variety of research-supported approaches to teaching. These approaches have been designed to make learning to read easier and more successful for all children. By examining the way readers process texts, and identifying the knowledge and skills needed to become a proficient reader, Peter Westwood explains why learning problems can sometimes occur and what can be done to prevent or overcome these difficulties.

Numeracy and Learning Difficulties

Approaches to Teaching and Assessment

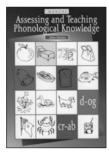
Peter Westwood ACER Press 2000

A comprehensive guide to teaching mathematics more effectively that examines the different ways students acquire mathematical skills, and helps teachers to develop flexible teaching methods that suit these varied ways of learning. It discusses common areas of learning difficulty in mathematics and 'why students fail'. It looks at ways for teachers to determine gaps in students' knowledge, how to develop curricula to address these gaps, and problem-solving strategies and skills as a means of improving numerical literacy.

Also available

Spelling: Approaches to Teaching and Assessment

For further details visit <www.acerpress.com.au>.



Assessing and Teaching Phonological Knowledge

John Munro ACER Press 1998

Key Features

- Includes assessment and teaching procedures
- Case studies illustrate the rationale of the program

Range

First three years of school and older children experiencing reading difficulties.

Purpose

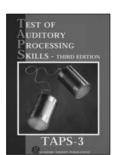
To identify the development level of phonological knowledge, assess whether difficulties are due to delayed or immature development, and recommend teaching procedures and follow-up tasks.

Administration

Varies – individual

Assessment Content

- Segmenting words into sounds Sound blending
- Manipulating sounds in words
- Phonemic recoding
- Awareness of sound patterns in words



Test of Auditory Processing Skills Third Edition

Nancy Martin, Rick Brownell, Academic Therapy Publications 2005

Key Features

- Seamless coverage for ages 4 through 18 years
- I Measures what a person does with what is heard
- Order of subtests reflects a developmental progression of tasks from easiest to most difficult
- Intended to be used along with other tests as part of a battery

Range

4.0-18.11 years of age

Purpose

To assess auditory skills necessary for the development, use and understanding of language commonly used in academic and everyday activities.

Administration

Approximately one hour - individual

Assessment Content

Nine subtests in the following four areas:

- Auditory attention (optional auditory figure-ground screener presented on CD at the start of the test session)
- Basic phonological skills (Subtest 1:Word Discrimination, Subtest 2: Phonological Segmentation, and Subtest 3 Phonological Blending)
- Auditory memory (Subtest 4: Number Memory Forward, Subtest 5: Number Memory Reversed, Subtest 6: Word Memory, and Subtest 7:
- Auditory cohesion (Subtest 8: Auditory Comprehension and Subtest 9: Auditory Reasoning)



Auditory Processing Abilities Test

Deborah Ross-Swain and Nancy Long Academic Therapy Publications 2004

Key Features

- Comprehensive, norm-referenced auditory processing battery
- Orally administered student performs a task or responds orally
- Tasks arranged in a hierarchy to quantify and define the severity of auditory processing problems
- I Initial assessment prior to referring to an audiologist

Range

5-12.11 years of age

Purpose

To identify children who may be experiencing auditory processing disorder, determine a child's specific strengths and weaknesses among a number of auditory processing skills, document a child's improvement in auditory processing skills as a result of therapeutic interventions, and provide a tool for research studies.

Administration

30-45 minutes – individual

Assessment Content

- Phonemic Awareness
- Semantic Relationships ■ Cued Recall
- Complex Sentences
- Following Directions
- Word Sequences
- Sentence Memory
- Content Memory
- Sentence Absurdities
- Passage Comprehension

More valuable resources to support your teaching



A Handful of Sounds Cued Articulation in Practice

Editor Jane Passy ACER Press 2003

A Handful of Sounds is written by speech therapists and teachers who have found cued articulation useful in many different settings.

Cued articulation was originally devised in the late 1970s to help severely language handicapped children understand that sounds could be represented by simple hand cues, which show where and how speech sounds are made. This original idea also includes colour-coded consonant sounds, which aids written work. The method was found to be an extremely useful teaching aid, not only for the severely language handicapped, but also with hearing impaired, learning disabled, dyslexic, immigrant and mainstream populations.

A Handful of Sounds contributes to current working practice by explaining and encouraging therapists to share their knowledge of phonetics and phonology with their colleagues. It shows how the system can be used in both clinical and classroom settings to aid remediation with speech, language, reading and spelling problems.

A Handful of Sounds is written in reader-friendly language, and includes case studies describing the use of cued articulation in a wide variety of settings. The result is a book that speech therapists and teachers will find has practical application in their day-to-day work.

Features

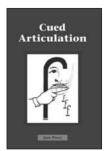
- case studies written by users of cued articulation demonstrate how simple it is to learn and apply
- describes useful approaches and provides practical support ideas
- I shows how cued articulation can support other literacy schemes
- an ideal companion text to Cued Articulation and Cued Vowels, also by Jane Passy

About the author

Jane Passy was born in India, educated in England and qualified from the Oldrey Fleming School of Speech Therapy in 1957. She has worked in many settings, both educational and medical, in England and India but spent most of her working life in Australia.

Her interest in phonetics stood her in good stead when she taught Spoken English to children and young adults from all over Asia while living in India from 1959 until 1967. Her interest in speech and language disordered children, and the enormous difficulty they have in recalling and producing sounds, inspired her to devise a system of hand cues and colour codes describing the sounds of speech. This she called cued articulation.

Since retiring from clinical practice she has promoted cued articulation through workshops throughout the United Kingdom and in Ireland and South Africa. She now lives in Scotland but is a regular visitor to Australia.





Cued Articulation Cued Vowels

Jane Passy ACER 1990

Jane Passy's highly successful technique first came about through her work with children with severe speech and language disorders.

Each of the 49 sounds (phonemes) that make up the English phonological system has a separate hand sign – related to where and how, in the mouth, the sound is made. The signs are logical and based on sound linguistic theory. The consonant sounds are colour-coded as an extra visual cue when doing written work.

Cued Articulation and **Cued Vowels** are two companion texts written by Jane Passy to help teach the pronunciation of spoken English. **Cued Articulation** describes how to cue the consonant sounds while **Cued Vowels** describes the 23 standard English vowel sounds.

Applications

- Speech pathologists who work with children developing speech sounds and with adults who have lost speech from accident or injury.
- Primary teachers who use it in the classroom with children learning the sounds of speech.
- Reading recovery teachers who find the approach helpful in showing phoneme—grapheme relationships.
- Teachers who teach correct pronunciation to those who have English as a second language.
- Visiting teachers of the hearing impaired who want their students to see the sounds they cannot hear.

Cued Articulation Wall Charts

Jane Passy ACER Press 2002

These large-format laminated wall charts help make cued articulation easily accessible in the clinic or classroom. All the consonant sounds can be displayed at the same time. The exact movement of each cue is indicated by a two-dimensional drawing. Reference to the books **Cued Articulation** and **Cued Vowels** is recommended for the exact three-dimensional movement of the hand or fingers.

The International Phonetic Alphabet (IPA) symbols appear in slashes as well as the regular letters.

The five short vowels are also added to complete the alphabet.



Ready Set Remember is a rich resource of information and activities for teachers with students who may have auditory processing difficulties. In order to listen well, a child must have adequate hearing, intact auditory processing skills and an 'active listening' mindset.

This book helps teachers identify children with auditory difficulties in the age range 5–8, before referring them to an appropriate health professional. When the child returns to the classroom, *Ready Set Remember* then provides strategies and activities to encourage children's confidence and improve their ability to efficiently and effectively remember auditory information by practising listening and sequencing tasks.

Section 1 of *Ready Set Remember* includes an introduction to hearing, auditory processing, active listening, short-term auditory memory and their impact on successful classroom listening. The factors affecting a child's ability to remember, and relationships between listening, auditory memory and literacy are also considered.

Section 2 and 3 have over 30 activities and accompanying support materials, which have been used successfully by the authors over the past 20 years.

Beatrice Mense

has taught across a range of educational settings for over 30 years, from pre-school to secondary school and university. She has a Masters degree in educational studies. Beatrice sees many children each week in a private literacy clinic and is an involved member of the Ready Set Learn team, providing support to staff and parents.

Sue Debney

is a speech pathologist with over 25 years experience working with children in a range of settings including community health centres, schools, hospitals, Ready Set Learn and private practice. She has a Masters degree in educational studies. Sue has a strong interest in the areas of auditory processing, literacy acquisition and language-related learning disabilities.

Tanya Druce

has worked in paediatric speech pathology for over 20 years at the Royal Children's Hospital, Melbourne, at Ready Set Learn and in private practice. She has a graduate diploma in neurosciences. Tanya believes that fun, engaging activities to practice auditory memory strategies are effective in managing short-term auditory memory delays.



