

Sample lesson plans to demonstrate the high reliability literacy teaching procedures

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Notes re assessing literacy knowledge

In each task area, arrange tasks in order of difficulty, for example, for 2, have three sentences that go from easy to hard for each year level.

Note alternatives to task 1: have students

- write up to 10 key words that you dictate
- say what they mean
- suggest synonyms where appropriate.

Note alternatives to task 4 : give students 3-4 sentence paragraphs and ask them to

- underline the topic sentence in each
- write the topic sentence for each.

Use the set of tasks to assess pre- and post- level knowledge for a unit. Use this to assess changes in learning.

Functions of the circulatory system

1. Under each of the following words or phrases, write another word or phrase that means the same.

	vessels	transports wastes	fight diseases	maintains	exchange nutrients
your word or phrase					

2. Write each of the following sentences in your own words. Replace every word, except those in italics, with another word. You can use the words in italics in the sentences you write

Sentence	Sentence in your own words
<i>The blood</i> transports wastes away from <i>the cells</i>	
<i>Arteries</i> which pass close to the skin are sites at which it is possible to detect a pulse count	
<i>The circulatory system</i> maintains correct body temperature	

3. Read each of the following sentences. Decide a question it answers and write this question beside the sentence in the right hand box.

Sentence	A question the sentence answers
The heart is located in the centre of the chest between the two lungs.	
The network of blood vessels that carry blood to all parts of our body is called the vascular system	
The build up of fat in the coronary arteries is a major cause of heart attacks.	

4. Match each the topic sentence in the left hand column below with a sentence from its paragraph in the right hand column .

topic sentence	letter for sentence	sentence	its letter
Blood is the only tissue of the body which is a liquid.		The volume of blood pumped into them by the heart is large	A
Capillaries are where nutrients and wastes are exchanged between the blood and body cells		Plasma is a clear yellowish fluid in which the blood cells are suspended	B
Arteries always carry oxygen-rich blood away from the heart to the rest of the body.		They have very thin walls and allow substances to pass through easily	C

5. Write in the words that finish each of the sentences below:

Blood circulates through the body. It carries _____ and _____ to all cells. As well, it carries _____ away from cells. It is moved by the _____. It is carried to all parts of the body by three types of vessels; _____, _____ and _____.

The blood that is rich in oxygen is carried from the heart by the _____. These have _____ walls. This allows them to take a lot of _____.

Area of a circle

1. Under each of the following words or phrases, write another word or phrase that means the same.

	radius	circumference	area	squared	diameter
your word or phrase					

2. Write each of the following sentences in your own words.

Sentence	Sentence in your own words
$A = \pi r^2$ $d = 2\pi r$ To find the area of a circle you square the radius and multiply it by π .	

3. Read each of the following sentences. Decide a question it answers and write this question beside the sentence in the right hand box.

Sentence	A question the sentence answers
$A = \pi r^2$ $d = 2\pi r$ To find the area of a circle you square the radius and multiply it by π .	

4. Write the formula you will use to work out each of the following. Each formula needs to include the variables mentioned in the problem

problem	formula
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A circle has a diameter of 7 cm.

Find the area of a circle of radius 12 cm

A circle has a radius of are 12 sq cm. Find its radius.

5. Write in the words that finish each of the sentences below:

Tina and Jack are in a Year 8 maths class. They are learning to work out the area of circles. In one task, they are told the radius of a circle. To work out the area of this circle they will _____.

Another problem asks then to find the area of a semi-circle. Tina does this correctly by using the formula $A = \pi r^2$ and then _____ her answer. They are told the area of another circle but not its radius. To work this out they _____.

Year 7 SOSE The Giant Panda Trends

Direction of lesson introduced : Problem examined in lesson : How to protect an endangered species.

Look at these pictures. This is This is All of these animals were living in this area when white men first came to live here. None of these types of animals are alive now.

Look at these pictures. In recent years we almost lost these animals.

Today we will look at what causes a type of animal to die out and what we can do to stop this from happening. If we don't do particular things now, some of the untamed animals living around here now won't be around in 50 years time.

Students stimulate and categorise what they know Look at these pictures again. Before they all died, things were changes around them. These changes caused them to be 'endangered' or threatened.

Students discuss and answer the following questions as a whole group activity

What do we mean by 'endangered animals' ?

What are some endangered animals in Australia ? We will make a list.

<i>Imagine you are a platypus swimming in a river. What things might threaten your life ?</i>	<ul style="list-style-type: none"> • Chemicals in water from industries poison you • The food you eat is killed and you starve • People hunt you and kill you
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Collate student responses

	What threatened you
Platypus	<ul style="list-style-type: none"> • The river becomes polluted • Imported animals such as cats attack you • You run out of food
Tasmanian devil	

What are words we use when we are talking about endangered animals ? As students suggest these, the class writes down the words. Any 2-, 3- syllable word is said stretched out to help them spell them. Words suggested included

- extinct
- endangered
- species
- environment
- hereditary
- nutrition

After writing each word students checked their spelling.

Discuss each term

- what it means; students suggests their understanding

- where the word came from
- other words that have a similar meaning.

Assemble these on the list

	What it means	Other words
extinct	not living	instinct
endangered	under threat, pressure to live	danger
species	a type of animal with its own features	special specimen
habitat	where something lives, its environment	
heritage	what an animal gets from its parents, grandparents	inherited inheritance hereditary

Introduction of new ideas We are going to look at one endangered species, the Giant Panda. What do you know about the Panda already? Picture in your mind a Panda. What do you know about what it does, where it lives. Note and collate students' responses:

- lives in China
- eats bamboo
- there are some in zoos
- black and white
- like bears
- kill people

Ask students to suggest the questions that each idea answered and note these:

lives in China	Where it lives ?
eats bamboo	What it eats
there are some in zoos	Are any in captivity ?
black and white	What are they like ?
like bears	What are they like ?
kill people	What do they do ?

You are going to read a text about the Giant Panda. Work in pairs to suggest questions you think the text might answer. Write these down. These were discussed by the class.

What would it be like living in China? We discussed what it

- population doubled in less than 100 years to 1 billion people
- people need houses that they build out of bamboo
- industry has increased in China

How might these things affect the Giant Panda?

We showed these on a diagram

More industry near the forest	The bamboo Pandas eat is being used for building	Trees in the forest are being cut down for fuel
	Panda community living in the wild in a forest	

Students read the text aloud.

The student group inspected and scanned over the text to be read. Each key feature at the overall level was noted. Individual students

- read aloud the heading and sub-heading,
- noted the sections in the text

- discussed the idea of topic sentences and how they could use them to help them , read the topic sentence in each paragraph
- noted the bullet points in the first paragraph and discussed what this meant
- noted the illustrations, the comment beneath it.

Students took turns to read the text aloud: a student

- aloud each sentence
- paraphrased it
- said the question that the sentence answered
- discussed each topic sentence.

As each paragraph was read, the main points were noted on the white board.

- Pandas need special environmental - bamboo forests in China
- Pandas eat only four types of bamboo - main one is arrow bamboo
- It takes 50 - 60 years for bamboo plant to mature. It takes 15 years before it is ready to eat

Students review what they have learnt.

The students reviewed the key ideas they had learnt re Pandas.
We drew a diagram to show life span of Bamboo and how it might affect Pandas
In pairs students listed the questions they could answer now about Pandas.

They worked in pairs to write an article headlined “What is threatening Pandas”.

Students work on an open-ended question.

In small groups students worked on the problem of how the Panda as an endangered species may be helped. They imagined they were asked for advice from the Chinese Government on how to improve the living conditions for Giant Pandas. They discussed the content raised in the lesson and wrote down several suggestions, for example

- alternative ways of building to using bamboo
- having protected areas for Pandas, Panda wild life parks
- having special bamboo farms to grow bamboo crops for Pandas
- changing the diets of Pandas.

Year 7 Art

Aim of lesson : Look at van Gogh's "Night Cafe in Artes", discuss interesting words

Literacy teaching procedures to be demonstrated

- helping students get their knowledge ready for learning and literacy by
 - organising what they already know
 - introducing key terms, words they know
- how to spell / write/ read unfamiliar words by
 - having them read and write the key words
 - read parts of the text aloud
- how to display their change in knowledge by reading and writing the key words in summary that they read text aloud and silently

Helping students get their knowledge of possible changes in the labour market by the following

Direction of lesson introduced : We are looking how artists use colour in their art, to help us have particular feelings. This will help you improve your art work .

Framework for organising what students know

Show van Gogh's "Night Cafe in Artes" and ask students to

put the painting into words

discuss the feelings it sets out to produce : What feelings does it make you have ?

Types of colours: students answer the following questions

- what colours do you see in the painting ?
- what are the different types of colours ?

Students categorise what they know : Grouping the colours - red, orange yellow, green blue and purple - the colour spectrum. Students finish off the dictated sentence

The colour spectrum has the colours in the order

Introduction of new ideas

Link the colours with feelings. Which make you feel warm or hot ? Which make you feel cold ?

Types of colours

- primary
- secondary

They list the new knowledge on the table

	red	orange	yellow	green	blue	purple
warm /cold						
primary /secondary						

They colour in the colour wheel in their notes and note

- colours that are opposite each other - complementary colours
- colours that are beside each other - analogous colours

Look at painting What do you feel if you have complementary colours beside each other ? What do you feel if you have analogous colours beside each other ?

Students read the text aloud. Before they begin to read, students are reminded

- this text is difficult; it has long sentences
- read each sentence slowly
 - say it in your own way
 - decide what question it will answer
- how to read each paragraph
 - read topic sentence
 - scan para for key words such as harsh, disturbing
 - read each sentence
 - consolidate

As they read the text aloud, they

- heard each sentence paraphrased
- said the question that each paragraph answered
- discussed the idea of topic sentences and how they could use them to help them

Point out how reading text about new ideas allows them to

- think through the new ideas more easily
- get a feel for the ideas, how to say them, how to say key words

Students read a summary of the ideas silently and note down the key words Students fill in the definitions on the right hand side of the text they read.

Students review what they have learnt.

- key ideas they have learnt
- questions they could answer now

Debriefing of session

Help students improve their word knowledge by saying each word in syllables, teach them how to do this to spell words they are not sure of, keep modelling it for them. Gradually build up word banks.

Help students learn how to read each sentence:

- read each sentence slowly
- say it in your own way
- decide what question it will answer

Help students learn how to read each paragraph

- read topic sentence what is para likely to be about ? What ideas would you expect ?
- scan para for key words such as harsh, disturbing
- read each sentence
- consolidate

As they read the text aloud, they

- heard each sentence paraphrased
- said the question that each paragraph answered
- discussed the idea of topic sentences and how they could use them to help them

Point out how reading text about new ideas allows them to

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Students review what they have learnt.

- key ideas they have learnt
- questions they could answer now

technological advances driven by the development of the computer	how people work, unemployment, need new avenues for training where they work : large centralised factories ----technology has allowed delocalisation communication with other countries - start of globalisation
financial system was deregulated; <ul style="list-style-type: none"> foreign banks could trade in Aus tariff protection for goods produced in Australia were reduced or removed. micro economic reform of transport and communications ways of deciding workers' pay, conditions changed. 	<ul style="list-style-type: none"> foreign companies could invest more easily in Aus, set up in Aus, buy Aus companies Aus companies could expand overseas cheaper goods from overseas some Aus businesses not be able to survive some Aus businesses would have to change how they do things <p>people could order things they need, make changes in what was made, sold and bought and how</p> <p>less likely to have big strikes. Could decide the pay and conditions more quickly</p>

Students read the text aloud. As they read the text aloud, they

- heard each sentence paraphrased
- said the question that each paragraph answered
- discussed the idea of topic sentences and how they could use them to help them

Point out how reading text about new ideas allows them to

- think through the new ideas more easily
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Students read a summary of the ideas silently and note down the key words

Labour market trends
<p>The way in which business is done in Australia has changed over the past 25 years. There have been six major changes.</p> <p>The first change has been in how production has been affected by advances in _____. This has been driven by the development of the _____.</p> <p>The second change has been in how the Australian _____ operates. This change were made so that Australia would be more _____. There were several major reforms:</p> <ul style="list-style-type: none"> first, the financial system was _____ ; this meant that _____ second, the _____ for goods produced in Australia were reduced or removed. Examples are _____ third, the transport and communications industries went through _____. Examples are _____ fourth, the agreements for deciding workers' pay and conditions were changed. This was referred to as _____.

Students discuss how the changes have worked. What would they look for to see if they had led to an improvement in how competitive Australia is?

Students review what they have learnt.

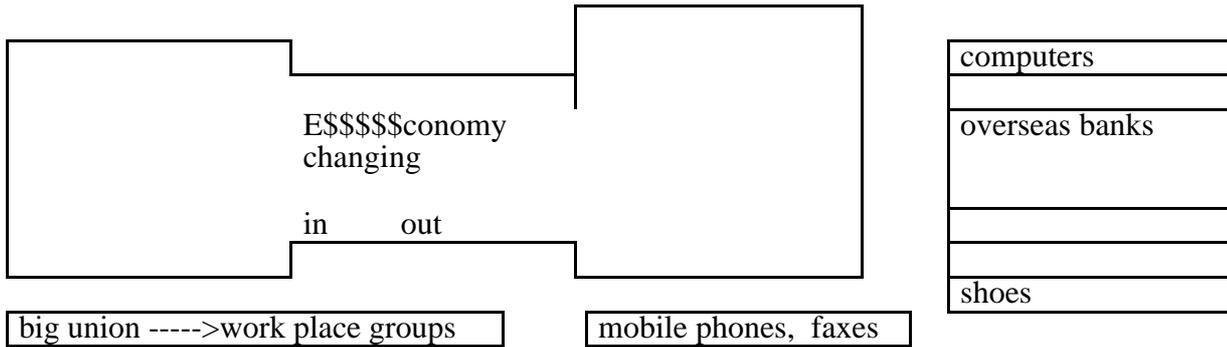
- key ideas they have learnt
- questions they could answer now

Debriefing of session Ways of improving presentation

About a week before this activity in future have students get information from their parents, etc, about what things were like 25 years ago, for example

- what people used in their work
- what they used to communicate
- how they did banking

Represent key ideas using icons, for example



Have students discuss the movements before they need to read about them. They can use this as a set of memory prompts.

Year 7 Woodwork Names of tools

Literacy teaching procedures to be demonstrated

- helping students get their knowledge ready for learning and literacy by organising what they know.
- how to spell / write/ read key words.

Helping students get their knowledge of possible changes in the labour market by the following

Direction of lesson introduced : Need to read / write the names of tools accurately.

Framework for organising what students know

Students were given a word bank of the names of tools, each with a number, and a set of matching pictures. They needed to match each word with its picture by writing the number on the picture.

Students took turns to read word aloud and to spell it . Where necessary, students heard each word said in syllables.

Students categorise their knowledge Students look at a timber product and say how the piece of timber has been changed to make the product

- bits have been cut off
- bits have been added, stuck on

To do this, need different types of tools;

	name for tool family
tools for cutting	cutting tools
tools for making holes	boring tools
tools for showing where to add the pieces, how much to add/ cut off	marking / measuring tools
tools for adding bits	assembling tools

The students heard the name of each tool, categorised it and wrote its name in its column.

cutting tools	boring tools	marking / measuring tools	assembling tools

Debriefing of session Other ways of including literacy activities in woodwork

- every 3rd-4th lesson could begin with a 5-10 minute reading activity in which students read text that sums up what they have been doing for the last 3-4 sessions - they can have text that they read and then do cloze
- use word matching activities such as Bingo in which students make up Bingo boards by writing down names of tools, etc and then see pictures of tools and need to name them and then read the name on their board
- when students need to use a set of actions, for example, to make an item, the detailed steps are written down and students read these and use them to guide their way through the task. They can use this in a diagnostic way when they get stuck, etc
- every 3rd-4th lesson could finish with a 5-10 minute reading activity in which students read text that sums up what they have been doing for the last 3-4 sessions - they can have text that they read and then do cloze
- when students need to do a project for example, *Why plantation timber is better than rain forest timber to use in construction*,

when they need to read information, they can paraphrase and summarise each paragraph and say what questions it answers, for example

para 1
para 2
para 3

how is it better economically, cheaper to harvest ?
 why is it better to use in construction ?

- when students are learning the names and uses of each tool they can hear the names of 4-5 tools said and write down the names and use following table to answer 4 W and H questions about them

	What is tool like ?	When is it used ?	How is it used ?	Why is it used?	What type of tool is it ?

What am I ? Students can be given the name of a tool and in small groups write a description of the tool by answering these questions. They read aloud their description and class members have to guess which tool it is as soon as they can. The winning team takes least time to guess the tools.

Year 8 SOSE Rainforests under threat

Literacy teaching procedures to be demonstrated

- helping students get their knowledge ready for learning and literacy by
 - organising what they already know
 - introducing key terms, words they know
- how to spell / write/ read unfamiliar words by
 - having them read and write the key words
 - read parts of the text aloud
- how to display their change in knowledge by reading and writing the key words in summary that they read text aloud and silently

Helping students get their knowledge of possible changes in the labour market by the following

Direction of lesson introduced : We are interested in looking at how the ways people work have changed over the last 25 years.

Students retrieve what they know : You have already spent some time learning about rain forests. Let's review that.

What is a rainforest ?

Why are rain forests important ? The lungs of the earth - they convert carbon dioxide to oxygen

Introduction of new ideas Types of rain forests

- temperate rain forests . Dandenong Ranges rain forest. What is it like? Key words you would use ? Where would you expect to find other temperate rain forests ? What climates would you need ? Areas of high rainfall (sides of mountains) - south west Tasmania
- tropical rain forests. Daintree rain forest. What is it like? Key words you would use ? Where would you expect to find other tropical rain forests ? What climates would you need ?

Students introduced to key concepts: read and write them Students write down the key words which are then written on board. Each key word is said in syllables to assist spelling new ideas were introduced in familiar ideas and then the jargon.

- land surface
- equator
- rain forest
- logging
- agriculture
- impenetrable

Students discuss and write their own description of each word.

Students read the text aloud. Before they begin to read, students are reminded

- this text is difficult; it has long sentences
- look at each paragraph, read topic sentence, say it in their own words and say what it might be about and decide questions it might answer.

Say it in their own words and	What it might be about	Questions it might answer.
Rain forests were once believed to be very thick bush it was hard to get through	How it is easier to get into rain forests now	Why is it easier to get into rain forests now ?
Rain forests cover about 6 per cent of the land of the Earth	Where the rainforests are	Where are the rainforests
Over half of the tropical rain forest area has been destroyed	How much has been destroyed	How fast is the forest being destroyed ?
Building towns, farming and gathering timber for industry has caused forest to be destroyed.	The ways the forest has been destroyed	What causes the forest to be destroyed

As they read the text aloud, they

- heard each sentence paraphrased
- said the question that each paragraph answered
- discussed the idea of topic sentences and how they could use them to help them

Point out how reading text about new ideas allows them to

- think through the new ideas more easily
- get a feel for the ideas, how to say them, how to say key words

Students read a summary of the ideas silently and write in the key words

Tropical Rain forests

Trees help us to live better in many ways. One way in which they do this is by producing air for us to _____. They do this by changing carbon dioxide to _____. The carbon dioxide comes from sources such as _____, _____ or _____.

They grow together most densely together in _____. Because they help all animal life to survive, rain forests have been called the _____.

Where are these rain forests ? Most of the world's rain forests are near the Equator. They are called _____. They cover about 6 % of _____.

About half of the world's rain forests are in just _____ countries. There are _____, _____ and _____. Over recent years at least _____ of the world's rain forests have been damaged or _____.

Why are the rain forests being destroyed ? The reason is _____. Sometimes industries want the _____. On other times the land where the forest grows is needed for _____.

Extend the new ideas Students discuss how they think the problem of destroying tropical rain forests needs to be handled. What advice would they give to the governments of the countries with the rain forests ? How might these countries be assisted so that they don't destroy an essential part of the world ?

Students review what they have learnt.

- key ideas they have learnt
- questions they could answer now

Year 7M Science How microscopes help us see small objects

Direction of lesson introduced : In this session we are going to look at how we can see very small things.

Students retrieve what they know : What is the smallest thing in your body ? How do you know they are there ? What do people use to see them ?

Introduction of new ideas

Your body is made up of very small building blocks called cells. Your blood is made up of millions of blood cells. Your skin is made up of very small bits called skin cells. You grow because these cells grow. Blood cells are different from skin cells.

All living things are made up of these tiny cells.

These cells are far too small for you to see them with your eye. What do you need to use to see them ? A microscope :

- microscope micro - very small, tiny
- scope - see

Other words with micro; microwave, microphone

Other words with scope; telescope

How a lens works. Class discussion with drawing showing

- how we can see anything because it gives out light
- how a convex lens spreads out the light that comes from a small item such as a beetle. What is a lens ? piece of glass shaped in a certain way. What it does is make something seem much bigger. Word for what a lens does - it magnifies.

The object you are looking at gives out light. What the lens does is spread out the light.

How do microscopes work ? They make things bigger by using lenses.

Students introduced to key concepts: read and write them Students write down the key words which are then written on board. Each key word is said in syllables to assist spelling new ideas were introduced in familiar ideas and then the jargon.

	What word means	An example
building blocks		no example
cells		
microscope		no example
lens		
transparent material		
spreads out		
micro		

Students discuss and write their own description of each word.

Students read the text aloud. Students read aloud the text p 162 : A whole new world.

We began by looking at the page and how information was presented, as follows

- student read title and we discussed what it might mean
- student read topic sentence and we discussed what it meant
- students took turns to read each paragraph as follows: read topic sentence, say it in their own words.

As they read the text aloud, they

- heard each sentence paraphrased

- said the question that each paragraph answered
- discussed the idea of topic sentences and how they could use them to help them

Point out how reading text about new ideas allows them to

- think through the new ideas more easily
- get a feel for the ideas, how to say them, how to say key words.

Students read a summary of the ideas silently and write in the key words

Seeing very small things

What is the smallest thing in your body ? Your body is made up of very small building blocks called _____. Your blood is made up of millions of _____ cells. Your skin is made up of very small bits called _____ cells. You grow because these cells grow. Blood cells are different from skin cells.

All living things are made up of these tiny cells. There are animal cells and plant _____.

These cells are far too _____ for you to see them with your eyes. To see them you need to use a _____. The word 'microscope' means 'seeing _____ things'.

Extend ideas Students discussed

- the diagram of the microscope used by Hooke and compare it with a modern microscope.
- things discovered using a microscope
 - cells in 1665 by Robert Hooke
 - animals made of one cell
 - bacteria
 - all animals and plants made of cells
 - the nucleus in cells

Students write down the key words which are then written on board. Each key word is said in syllables to assist spelling new ideas were introduced in familiar ideas and then the jargon.

	What word means	An example
magnify		
increased		
organism		

Students discuss and write their own description of each word.

Students read a summary of the ideas silently and write in the key words

Microscopes make things seem much bigger by _____ them. They do this by using _____. A lens is piece of transparent material such as _____. It is shaped in a certain way so that it spreads out the _____ from the object you are looking at .

Many things have been discovered using a microscope. Robert Hooke in 1665 discovered _____. Soon after this, animals made of _____ were discovered. Later people discovered parts of cells such as the _____ in cells.

Students review what they have learnt.

- key ideas they have learnt
- questions they could answer now

Debriefing We discussed

- procedures for increasing the ways in which reading can be used in teaching science

- how to help students understand what they read.

While students are reading aloud a text, after reading each sentence or group of sentences we can ask them to

- say it in their own words, that is, paraphrase it.
- visualise what it is saying
- say a question that it answers
- summarise 2 or more sentences, a paragraph.

We need to give them feedback each time they do this to help them see how close / accurate their responses are.

As well as this, we can teach them to read the title and topic sentences and discussed what they mean.

We also discussed what teachers can do to help students remembering key ideas long-term. We can

- ask them to say what they are going to remember as concisely as possible.
- link these ideas with what they know; *What do these ideas remind you of? How are they like / different from things you already know?"*
- have them draw a picture of the main ideas, use a concrete model, make a mental picture of them
- say when they will use the ideas in the future.
- imagine themselves remembering them.
- say what is helping them to remember it.

Year 8 Health Peers and peer group pressure

Direction of lesson introduced : In this session we are going to look at how the groups you belong to affect how you operate and how you can learn from working effectively in these groups

Students retrieve what they know : What is the smallest thing in your body ? How do you know they are there ? What do people use to see them ?

You are passing through a time of your life when things are changing for you. What are some names for this period

- teenager
- adolescence

Think of child of 7 or 9 and an adult of 40 How are they different ?

child of 7 or 9

adult of 40

Students suggested a number of differences

- | | |
|--|---|
| <ul style="list-style-type: none"> • sexually immature • weak • depend on adult • rely on adult • not in control • don't know much | <ul style="list-style-type: none"> • sexually immature • strong • independent • self reliant • in control • know more |
|--|---|

Introduction of new ideas

You are in the middle - moving from being child, dependent to being independent adult

child of 7 or 9

You are here
----->

adult of 40

Part of this involves learning to operate in peer groups. In these groups you learn to rely and trust peers, friends rather than your parents or other adults.

Small group activity : Which groups do you belong to ? Students listed some of the groups to which they belonged. In a class discussion we discussed what they learnt in each group. The groups they suggested and some of the learning outcomes were recorded in the following table

football team	skills, how to play by the rules
class	ways of doing things
family	values
KFC colleagues	how to do things in work place
cricket team	
scouts	

The students discussed the whether each group helped them learn

- how to handle situations , how to deal with and solve problems and you can try these
- learning how to talk with peers in useful ways
- learning how to work together, do things together - gangs become important
- learning to support each other

These were listed as positive things they could learn from their peers.

They noted that different types of groups

- have a particular purpose, eg sports team
- based on wanting to do things the same way - a clique

Students wrote down key concepts: Students wrote down the following key concepts from the white board.

Positive things you learn from your peers

- learning how to handle situations - you discuss how they deal with problems and you can try these
- learning how to talk with peers in useful ways
- learning how to work together, do things together - gangs become important
- learning to support each other

Students introduced to key concepts: read and write them Students wrote down the following key words which were dictated and then written on board. Each key word was said in syllables to assist spelling new ideas were introduced in familiar ideas and then the jargon.

	What word means	An example
teenager		no example
adolescence		
independent		no example
peer group		
rely		
options		
clique		

Students discuss and write their own description of each word.

Negative ways in which your peer group can affect you

- when you feel pressured to do or say things you don't want to do. You may do these things because you don't want to lose your friends and you don't know how to say "No"

Students read a summary of the ideas silently and write in the key words

You are passing through a time of your life when things are changing for you. Names for this period include being a _____ and _____. You are moving from being a dependent _____ to being an independent _____.

Part of this involves learning to operate in peer _____. You are learning to rely on and to _____ peers or _____ rather than parents or adults.

Positive things you learn from your peers

- learning how to handle _____ . You can discuss how to deal with _____
- learning how to talk with peers in useful ways, how to _____.
- learning how to _____ together
- learning to support each other

Negative ways in which your peer group can affect you

- when you feel pressured to do or say things you _____. You may do these things because you don't want to lose your friends and you don't know how to say "No".

Extend ideas Learning how to be your own person How can teenagers be their own persons in groups ?

- by letting their friends know how they feel, eg, when they feel pressured
- by being able to say when they don't agree with something other members are doing or planning
- by attempting to choose your friends

When might teenagers want to say "No" to a group

- pressure to smoke
- drink alcohol
- vegetarian eat meat

The group discussed the following case study : Tom is being pressured to travel in a car with a driver who has been drinking alcohol.

How might group try to pressure Tom ? The class discussed each of the following and gave examples of each:

- bad logic
- use put down
- make him feel guilty
- dare him
- reject him
- threaten him
- say 'everyone else is doing it'

How can he say No ? The class discussed how Tom could refuse by doing each of the following:

- say why he objects to it -
- play down pressure
- say the consequences he doesn't want - lung cancer, short breath (he likes sport)
- suggest alternatives

Students read a summary of the ideas silently and write in the key words Ann is at a party. Some of her friends are pressuring her to go in a car driven by a young driver who has been drinking beer. How might her friends try to pressure her ? Give an example of each of the following

• use bad logic	
• use put down	
• make her feel guilty	
• dare her	
• reject her	
• threaten her	
say 'everyone is doing it'	

How would you advise her to say "No" ? What types of reasons could she give to say "No" ?

How many people live in Australia ?

Challenge : Where do most Aus live ? narrow coastal strip from Brisbane to Adelaide - population density is higher in this area than in inland Aus. To say how many people there are living in an area of land we talk about the number of people who live in a square kilometre of land.

Australia is highly urbanised - most Australians live in cities and towns - 85 %

Write down these words

Where do most Aus live ?

	say what it means in your own words
• narrow coastal strip	strip of land near the coast
• population density	how many people live in an area of land
• inland	away from the sea
• square kilometre	
• urban	town or cities
urbanised	people living in town or cities

- Brisbane
- Adelaide
- south east

Reading activity read text

Do cloze

What questions does this answer ?

Why do they live in these areas ? Why did early European visitors settle here ?

- reliable pure water south eastern Aus has rivers that supply good water
- areas that will provide food. The area behind and surrounding the coast or a river is called its ". These areas provide food for humans and their animals, the materials people need for building. This area has good pasture, forests
- so that transport is easy - early transport by sea- to be close to transport - south eastern Aus has good s, ports.

Write down these words

• climate	
• reliable water supply	
• hinterland	
• fertile	
• harbour	

Reading activity read text

Do cloze

Before white men came to Aus, there were over 600 Aboriginal groups. Where did most Aboriginal people live ? What was the population density like ? look at map on page 122. They had the same density as today. They didn't need to build big cities. Why do you think they lived here ?

- food was plentiful, hunting was easier

One way Aboriginals used to manage their environment was by burning large areas of grass and bush. Why would burning the bush help them to live? This helped them to live by

- encouraging fresh green growth
- provided ash for the soil
- attracted animals and plants to the burnt areas after fires
- animals trapped in fire could be hunted and trapped easily

What effects did the burning have?

- created the eucalyptus forests that existed when white men arrived in Aus
- may have caused some animal and plant species to disappear

Another thing Aboriginals did was to dam rivers and build rock traps to catch fish.

Reading activity read text

Do cloze

Key terms	say what it means in your own words

Australia's Human Environment Part 1

Most Australians live in a narrow coastal strip of land that in the _____ of Australia. This strip stretches from Brisbane to Adelaide. The term we use to talk about the number of people living in an area is its _____. The population density is higher in this area than in _____ Australia .

Most Australians live in cities and towns; we say that Australia is highly _____.

Australia's Human Environment Part 2

Why do they live in these areas ? The early European visitors settled here because it had

- a pleasant climate - Europeans coming to Australia wanted a climate they would be used to.
- a reliable supply of pure _____.
- fertile areas to provide _____. The area behind and surrounding the coast or a river is called its '_____'. These areas provide food for humans and their animals and the materials people need for building. It has good pasture and forests.
- good harbours and ports that made _____ easy.

Australia's Human Environment Part 3

Before white men came to Australia , there were over _____ Aboriginal groups. Most Aboriginal people also lived in _____ Australia . Aboriginals didn't need to build big _____. They lived here because food was _____. One way Aboriginals used to manage their environment was by _____. This helped them to live by encouraging fresh _____. providing _____ for the soil and attracting animals and plants to _____. Another thing Aboriginals did was to _____ rivers and build _____ to catch fish.

What does $t_n = a + (n-1)d$ say ? What does it tell you to do ?

What questions could you ask about it ?

- you are told a, n, d , work out t_n
- you are told t_n, n, d , work out a
- you are told t_n, a, d , work out n
- you are told t_n, n, a , work out d

You can get tasks that ask you to do each.

In small groups, make up an example of each

told a, n, d , work out t_n	told t_n, n, d , work out a	told t_n, a, d , work out n	told t_n, n, a , work out d

Look at the first few tasks. A student reads each one aloud and other students categorise it by saying

- what they are told
- what type it is

Extend to geometric sequences

How is number patterns such as $t_n = 3, 7, 11, \dots$ different from $t_n = 3, 12, 48, \dots$

Use the questions you can ask about $t_n = 3, 7, 11, \dots$ to ask questions about $t_n = 3, 12, 48, \dots$

Questions about $t_n = 3, 7, 11, \dots$	maths term and symbol	Questions about $t_n = 3, 12, 48, \dots$	maths term and symbol
<ul style="list-style-type: none"> • difference between terms ? • first term ? • n th term ? • second term ? 	<p>common difference, d</p> <p>initial term, first term, a</p> <p>t_n</p> <p>t_2</p>	<p>what you multiply by to get from one term to next</p>	<p>common ratio, r</p> <p>a</p> <p>$t_n = a r^{n-1}$</p>

What does $t_n = a r^{n-1}$? What does it tell you to do ? What questions can you ask about it ?

How could you decide if a a sequence is a geometric sequence ?

Year 8 SOSE Protecting property from bushfires

In this lesson students

- reviewed what they knew re bushfires. David reviewed the link between the three concepts oxygen \leftrightarrow fuel \leftrightarrow heat worked through a task in which they identified 12 potential dangers to a house during a bush fire
- reported their findings to the class
- drew a plan of their house and identified potential sources of danger re bushfires and a possible fire escape plan.

This was an interesting topic for the students. It was presented in a problem solving way.

From a literacy perspective, a future lesson on this topic could include the following

Initial challenge : the task to be examined is introduced as the challenge : A bushfire is approaching your house. You have 3-4 minutes to secure it to minimise the chance that it will be burnt down. What will you do ?

Collate students' existing knowledge on the board. The initial discussion and picture of the house can be used to organise and collate these on the board. This would allow students' spelling to be targeted.

Using the task to develop learn new ideas. Before having students begin the task individually, I would have the class as a group

- discuss the main ideas, link what they know with it,
- say what they think the answers are,
- suggest what they would write for 1... 12.
- say what the outcome would be like

Some of the students seemed to have difficulty working independently through it and needed to see how they could align what they knew with what the task was asking. This should help them use what they knew on the task and stay focused.

More abstract understanding Following the specific example, as students' responses were being collected, the key ideas that underpinned them could be reviewed and written on the board so that the students could use these later.

Application A fire escape plan for their home. Some of the students had difficulty drawing a plan of their house. They did not seem sure exactly what to show. They needed to

- draw a rough plan, just to get the approximate positions of rooms
- decide how they need to modify it and draw a more accurate plan from this

They could discuss the key features of an escape plan. This would indicate the criteria they needed to attend to, for example,

- easy egress that was away from the direction of the fire
- easy access to water
- maximum protection from smoke and heat.

A key aspect of these suggestions is that several of the students need to improve their ability to work independently and to learn how to plan their way through tasks and to align what they know with the tasks. To help them learn to do this, lessons probably need to be broken into smaller units of guided instruction with a focus towards independence for each small activity. Given the focus on presenting the ideas in a problem solving way it is even more important that students learn how to problem solve in this context and learn to be more self managing and directing. The literacy perspective provides a basis for this structure. In this way students should be more likely to finish tasks successfully and learn how to do this, through the modelling provided.