



Royal Flying Doctor Service



LOOK! UP IN THE SKY YEAR 6 - UNIT PLAN

> Helping Australia
Shrink

Royal Flying Doctor Service Tasmania

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LOOK UP INTO THE SKY > Helping Australia Shrink

Year 6 Australian Curriculum Humanities and Social Sciences Focus

Topic of the unit

Using the interactive resources located 'www.flyingdoctor4education.org.au', students explore the development of the Royal Flying Doctor Service and the impact the organisation has had on communities in the outback of Australia. They will investigate the role they have played in shrinking the distance between these communities and the rest of Australia.

Students Develop and Understanding of

The contribution of the Royal Flying Doctor Service to the development of Australian society since Federation (ACHASSK137)

Inquiry Questions

- > How did Australian society change throughout the twentieth century?
- > What contribution have significant individuals and groups made to the development of Australian society?



GROWING UP AN INLANDER >

Aim of the Unit:

The Royal Flying Doctors (RFDS) Helping Australia Shrink is a Humanities Social Science Year 6 unit of work. The content descriptors for this unit are from the Australian Humanities and Social Science Curriculum v8.2 (www.australiancurriculum.edu.au). The unit is designed to build students knowledge of the Royal Flying Doctors and the contribution they made to the development of communities in Inland Australia. Throughout the lessons students should gain an understanding of how the RFDS has helped communities to overcome the challenges caused by distance and remoteness, medically, educationally and socially, thus seeming to shrink these distances. They will see how the contributions of the RFDS have impacted on development of rural and remote communities. They will draw conclusions on the importance of the organisation to these communities both in the past and today.

Year 6 Level Description

The Year 6 curriculum focuses on the social, economic and political development of Australia as a nation, particularly after 1900, and Australia's role within a diverse and interconnected world today. Students explore the events and developments that shaped Australia as a democratic nation and stable economy, and the experiences of the diverse groups who have contributed to and are/were affected by these events and developments, past and present. Students investigate the importance of rights and responsibilities and informed decision-making, at the personal level of consumption and civic participation, and at the national level through studies of economic, ecological and government processes and systems. In particular, students examine Asia's natural, demographic and cultural diversity, with opportunities to understand their connections to Asian environments. These studies enable students to understand how they are interconnected with diverse people and places across the globe.

The content provides opportunities for students to develop humanities and social sciences understanding through key concepts including **significance; continuity and change; cause and effect; place and space; interconnections; roles, rights and responsibilities; and perspectives and action.**

Year 6 Achievement Standard

By the end of Year 6 students explain the significance of an event/development, an individual or group. They identify and describe continuities and changes for different groups in the past. They describe the causes and effects of change on society. They compare the experiences of different people in the past.

Students sequence information about events and the lives of individuals in chronological order and represent time by creating timelines. When researching, students develop appropriate questions to frame a historical inquiry. They identify a range of primary and secondary sources and locate, collect, organise and categorise relevant information to answer inquiry questions. They analyse information or sources for evidence to determine their origin and purpose and to identify different perspectives. Students develop texts, particularly narrative recounts and descriptions. In developing these texts and organising and presenting their information, they use historical terms and concepts, and incorporate relevant sources.

RFDS BACKGROUND INFORMATION >

RFDS

The Royal Flying Doctor Service (RFDS) takes the finest care to the furthest corners of Australia.

It is one of the largest and most comprehensive aeromedical organisations in the world, providing extensive primary health care and 24-hour emergency service to people over an area of 7.3 million square kilometres. The service began in 1928 as an emergency rescue service and today delivers extensive primary healthcare and 24-hour emergency services to those who live, work and travel throughout Australia. The RFDS reaches 80% of Australia with no patient more than two hours away from help. Last year the RFDS assisted 282 000 people through emergency rescues, clinic services, patient retrieval and inter-hospital transfers or tele-health services.

The RFDS is a federation, with each of the six Sections operating within a federal agreement, under the governance of the Federation board, members of which voluntarily contribute their time.

RFDS is funded through a combination of the Australian Government, State and Territory Governments and our own fundraising initiatives and the provision of other services.

Delivered by a dedicated team of professionals, using the latest in aviation, medical and communications technology, and supported by a vast number of volunteers and supporters, the RFDS is vital for those that live, work and travel in rural and remote Australia.

John Flynn

- > The RFDS began as the dream of the Rev John Flynn, a minister with the Presbyterian Church. He witnessed the daily struggle of pioneers living in remote areas where just two doctors provided the only medical care for an area of almost 2 million square kilometres.
- > Flynn's vision was to provide a 'mantle of safety' for these people and on 17 May 1928, his dream had become a reality with the opening of the Australian Inland Mission Aerial Medical Service (later renamed the Royal Flying Doctor Service) in Cloncurry, Queensland.

Timeline

- > The very Rev John Flynn OBE (1880-1951), 'Flynn of the Inland' lived in the Outback for the most of his life, setting up hostels and bush hospitals for pastoralists, miners, road workers, railwaymen and other settlers.
- > In 1912, he established the Australian Inland Mission to minister to the spiritual, social and medical needs of people in the Outback.
- > In 1917, he received an inspirational letter from Lieutenant Clifford Peel, a Victorian medical student with an interest in aviation. The young man and war hero suggested the use of aviation to bring medical help to the Outback. Shot down in France, he died at just 24 years of age and never knew that his letter became a blueprint for the creation of the Flying Doctor Service.
- > For the next ten years, Flynn campaigned for an aerial medical service. His vision was to provide a 'mantle of safety' for the people of the bush, and his vision became a reality when his long time supporter, HV McKay, left a large bequest for 'an aerial experiment' which enabled Flynn to get the Flying Doctor Service airborne.

- > At this time, Flynn also met Hudson Fysh, a founder of QANTAS. In 1927, QANTAS and the Aerial Medical Service signed an agreement to operate an aerial ambulance from Cloncurry, Queensland.
- > When our first pilot, Arthur Affleck, took off from Cloncurry on 17 May 1928, he was flying a single engine, timber and fabric bi-plane named 'Victory'
- > He had with him the very first of our flying doctors, Dr Kenyon St Vincent Welch.
- > In those days, not much territory was charted, so our pilots were forced to navigate by river beds, fences, telegraph lines and other familiar landmarks. Despite these obstacles, in its inaugural year, the Aerial Medical Service flew 50 flights to 26 destinations and treated 225 patients.
- > On November 11 1928 an electrical engineer named Alfred Hermann Traeger invented a simple but ingenious device. His 'pedal wireless' was a major communication breakthrough, bolstering the fledgling Flying Doctor Service and transforming life in the outback. Prior to his invention radio contact between the Flying Doctor Base and the stations did not exist.
- > In 1934 the Presbyterian Church handed the service over to the Australian Aerial Medical Service and sections were established across Australia.
- > In 1942 the Service was renamed the Flying Doctor Service.
- > The School of the Air was established in Alice Springs in 1951.
- > In 1955 HM Queen Elizabeth II added the prefix 'Royal' to its name in recognition of the service's valued contribution to the outback.
- > Today we own a fleet of 71 fully instrumented aircraft with the very latest in navigation technology. Our pilots annually fly the equivalent of 34 round trips to the moon and are responsible for the care of over 270 000 patients.

Tasmanian Specific

- > 1960 - RFDS was officially established in Tasmania to provide a 24 hour emergency evacuation and inter-hospital aero-medical transfer service. Aircraft were chartered from Tasmanian Aero Clubs.
- > 1993 – The Tasmanian Section purchased its own plane.

What we do in Tasmania.

- > In Tasmania the RFDS works under contract with Ambulance Tasmania to fill the vital role in the delivery of essential health care services by supplying the state's fixed wing air-ambulance. The RFDS operates 24 hours a day, 7 days a week and provides Tasmanians with services which include emergency trauma evacuations and inter-hospital transfers to take patients to the specialist care they need.
- > The RFDS also delivers a range of primary health care services and community projects for the benefit of all Tasmanian
- > The generosity of our supporters has enabled the RFDS to provide specialist medical equipment and ancillary aviation equipment for the aircraft, patient transfer facilities at regional airports and medical, dental and nursing scholarships for young Tasmanians to experience working in remote communities in Outback Australia. In addition, RFDS Tasmania supports the provision of dental services to Flinders Island and is currently expanding preventative health programs in regional areas of the state.
- > Our plane – Beechcraft King Air B200C. Twin engine turbo-prop aircraft. Configuration – two stretchers/5 seats or 1 stretcher/7 seats. Fully pressurized and has a range of 1000 Nautical miles and a max height of 35000 feet. Costs more than 11 million dollars to purchase and equip as a flying intensive care unit.



RESOURCES >

Useful Websites

www.flyingdoctor4education.org.au

www.flyingdoctor.org.au

<https://www.flyingdoctor.org.au/map/>

> A map that shows RFDS flights operating in real time.

Useful Books

- > Bush kids : growing up on an outback station in Australia / Jennie Bucknell
- > Radio Rescue / Jane Jolly and Robert Ingpen

UNIT LESSONS >

Lesson	Stage	Online unit/page	Lesson
1	Orientation	History P1	What do you know about the Royal Flying Doctors? Who are the Royal Flying Doctors and What do they do.
2	View	History P2/3/4	Challenges and importance of Outback Living.
3	View	Geography p2	'Furthest Corner' Documentary
4	View	Geography P3/4	Mel from Helen Springs Station
5	View	Geography P 5/6	Reverse Chronology – Helping Mel. How would helping Mel have been different in the past.
6	Explore	Geography P1/2/3	Mapping- Population distribution, RFDS Bases
7	Explore	Geography p 3	Mapping – Measuring Distance
8	Explore	Geography P4/ History P1	Explore the Royal Flying Doctors Base at Broken Hill
9	Explore	Geography P5/ History P2	Research – Investigation Questions.
10	Make	Geography and History	Prepare a display for an exhibition to present to other classes.



CURRICULUM LINKS > Content Descriptions

Questioning	Researching	Analysing	Evaluating and Reflecting	Communicating
<p>Develop appropriate questions to guide an inquiry about people, events, developments, places, systems and challenges(ACHASSI122)</p>	<p>Locate and collect relevant information and data from primary and secondary sources(ACHASSI123) Organise and represent data in a range of formats including tables, graphs and large- and small-scale maps, using discipline-appropriate conventions (ACHASSI124) Sequence information about people’s lives, events, developments and phenomena using a variety of methods including timelines (ACHASSI125)</p>	<p>Examine different viewpoints on actions, events, issues and phenomena in the past and present (ACHASSI127) Interpret data and information displayed in a range of formats to identify, describe and compare distributions, patterns and trends, and to infer relationships (ACHASSI128)</p>	<p>Evaluate evidence to draw conclusions (ACHASSI129) Work in groups to generate responses to issues and challenges (ACHASSI130) Reflect on learning to propose personal and/or collective action in response to an issue or challenge, and predict the probable effects (ACHASSI132)</p>	<p>Present ideas, findings, viewpoints and conclusions in a range of texts and modes that incorporate source materials, digital and non-digital representations and discipline-specific terms and conventions (ACHASSI133)</p>
Cross Curricular Opportunities / Links to other areas				
<p>English Participate in and contribute to discussions, clarifying and interrogating ideas, developing and supporting arguments, sharing and evaluating information, experiences and opinions (ACELY1709)</p> <p>Use interaction skills, varying conventions of spoken interactions such as voice volume, tone, pitch and pace, according to group size, formality of interaction and needs and expertise of the audience (ACELY1816)</p>	<p>Plan, rehearse and deliver presentations, selecting and sequencing appropriate content and multimodal elements for defined audiences and purposes, making appropriate choices for modality and emphasis (ACELY1710)</p> <p>Mathematics Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers (ACMNA128)</p>	<p>Connect decimal representations to the metric system (ACMMG135)</p> <p>Convert between common metric units of length, mass and capacity (ACMMG136)</p> <p>Introduce the Cartesian Coordinate System using all four quadrants. (ACMMG143)</p> <p>Access prior learning (yr 5): Use a grid reference system to describe locations, describe routes using landmarks and directional language. (ACMMG113)</p>	<p>Solve problems involving the comparison of lengths and areas using appropriate units (ACMMG137)</p> <p>Health and Physical Education Investigate community resources and ways to seek help about health, safety and wellbeing (ACPPS053) Investigate the role of preventive health in promoting and maintaining health, safety and wellbeing for individuals and their communities (ACPPS058)</p>	<p>Recognise how media and important people in the community influence personal attitudes, beliefs, decisions and behaviours (ACPPS057)</p> <p>HASS: Economics and Business The reasons businesses exist and the different ways they provide goods and services (ACHASSK151) (Lesson 2)</p>

TEACHING AND LEARNING >

Teaching Strategies and Learning Experiences	Assessment Opportunities	Differentiation	Resources
View			
<p>Lesson 1 - Who are the Royal Flying Doctors and what do they do?</p> <ul style="list-style-type: none"> > View photos in the Resources section – RFDS Today. Choose 1 or 2 significant photos and ask the students to ‘Think, Pair, Share’ what is happening. > Use ‘Think, Puzzle, Explore’ to identify what students think they already know about the Royal Flying Doctor Service, what puzzles them and what they would like to explore. Record in the thought bubble provided on the website. > Ask students to share any experiences they have had with the RFDS. If most students have a story to share, they could write about the experience and illustrate their story to create a display in the classroom. > Use the PowerPoint slide to view and discuss the various roles of the Royal Flying Doctors and a brief history as presented on the \$20 note. > Unit Introduction – Outline the Unit, what students will be learning and what the assessment task will be. 	<p>Diagnostic assessment opportunities: - use the discussion to determine students' current knowledge of the Royal Flying Doctors.</p>	<p><i>To be added by the teacher to suit the needs of the students in the class.</i></p>	<ul style="list-style-type: none"> > Online unit –History P1 > Photos – RFDS Today > PowerPoint – What the RFDS Do. > Think, Pair, Share – Visual Thinking Reference sheet. > Think, Puzzle, Explore – Visual Thinking reference sheet.
<p>Lesson 2 – Challenges of Out Back Living</p> <ul style="list-style-type: none"> > View the picture of Veld Sheep Station for 1948. Use the visual thinking routine ‘See, Think, Wonder’ to encourage student discussion of the picture. > Brainstorm the struggles the family would have faced using the table provided on P3. > Discuss what industries there are, in Australia that requires people to live and work in the out back. > Construct a flow chart to show understanding of what industries we have in the outback, what they produce and why they are important for Australia’s economy. > Watch the short documentary ‘The Furthest Corner’ about the way the Flying Doctor Service has addressed the issue of distance in supplying medical assistance to isolated communities. 			<ul style="list-style-type: none"> > History P2/3/4 > Outback Industries Flow Chart > History P5 > See, Think, Wonder – Visual thinking reference sheet.

Lesson 3 – Mel from Helen Springs Station

- > View the picture of an injured Mel receiving help from the RFDS following her accident.
- > Using google maps have a look around Mel's home – Helen Springs.
- > While you are exploring you might like to zoom out and try to find the nearest large settlement. Use the directions option to calculate distances to the nearest centres where Mel might be able to access medical, shopping etc. (Darwin, Alice, Adelaide, Mount Isa etc)
- > In groups discuss and record 5 observations of the local environment around Mel's home.
- > Compile a class list of your observations and discuss what they might mean for the people living there. Discuss things such as: the type of work they do, the dangers, the challenges, the rewards, the hardships, climate, accessibility to services, distances to services/facilities students are used to accessing easily.

- > Geography P3/4
- > Somewhere to record observations.
- > Internet access and google maps – best impact on an interactive whiteboard or other large screen.

Lesson 4 – Helping Mel – Now and Then

- > View the picture provided of Mel. Use Visual Thinking Routine 'What makes you say that?' to help students identify what is happening in the photo. What help is she receiving, speculate on her injuries, identify the equipment you see etc.
- > Construct a list of events, in reverse chronological order, from Mel being airlifted to hospital back to her riding her motorbike.
- > Be thorough in your list and include specific details of the events.
- > View the picture of 'Mel' as she might have looked in 1880.
- > Discuss the challenges she might have faced in getting medical help after a similar accident.
- > Discuss some of the complications of her injuries she may have faced with no or delayed medical intervention.
- > Construct a list of events from Mel's accident to the possible outcome.
- > Record your observations on the 'Observations of Mel – Then and Now' sheet.

- > Geography P5/6
- > Observations of Mel – Then and Now (Sheet)
- > What makes you say that? – Visual thinking reference sheet.

Explore			
Lesson 5 – Mapping Population Distribution > View and discuss the map provided. Use your own research and the maps provided in the appendix to mark the areas where most of the people helped by the RFDS live. > View the map on page 2 to see where the RFDS bases are located. Click on each base to find out more.			> Geography p 1,2
Lesson 6 – Calculating Distance > Read and discuss the page from a RFDS log book. It shows a small selection of pick ups from a one week period. > Using Google Maps, calculate the distances travelled on each pick up and total for the week. > Ext: Use the table 'Average Distances Travelled in One Hour' to calculate how long this would have taken without the Flying Doctors.			> Geography P 3 > Google Maps > 'Average Distances Travelled in One Hour' table
Lesson 7 – Virtual Museum Trip – Expert Groups (May need multiple lessons) > Today your class will go on a virtual trip to the RFDS Base where the RFDS Museum is located. > As a whole class spend some time exploring the museum. > Divide class up into 10 Expert' Groups. Give each group one Inquiry question to research. They need to become the experts on their question and report back to the whole class. This could be done either informally or formally.			> History P1 > Expert Group Inquiry Questions and Note taking sheet.
Make > Helping Australia Shrink - New Museum Exhibit.			
Lesson 8 – Helping Australia Shrink (May need multiple lessons) > To help students understand the concept of a place shrinking, discuss how technology is helping the world shrink. Planes vs Ships for travel, phones and email vs letters for contact. > Use the Museum to investigate the Inquiry Questions on the website. > Make a mind map with students to organise the information			> History (Explore) P5/6
Lesson 9 – Develop a New Museum Exhibit (Will need multiple lessons) > Students develop a new museum exhibit to demonstrate their knowledge of the contributions made to the Royal Flying Doctor Service and how those contributions have helped Australia to 'Shrink'.	<i>Summative Assessment Opportunity: Student responses should demonstrate their understanding of the Content Descriptions of the unit.</i>		> History p 1/2 > Student Task Sheet > Assessment Rubric

Feedback to Students *(These are suggestions. Teachers will need to vary according to the requirements of their curriculum and the needs of their students.)*

Ways to Monitor Learning and Assessment

Class teacher:
Initially plan the teaching, learning and assessment needs of all learners and make adjustments to the unit plan as necessary
Use diagnostic and formative assessment opportunities throughout the unit to plan for students learning and assess student knowledge development
Mark presentations and moderate with colleagues to achieve consensus and consistency of teacher judgment

Feedback to Students

Teachers:
Plan opportunities for conversations to provide ongoing feedback (spoken and written) and encouragement to students on their strengths and areas for improvement
Reflect on and review learning opportunities to individualise learning experiences required
Provide multiple opportunities for students to experience, practise and improve knowledge, processes and skills

Students:
Identify what they can do well and what they need to improve
Provide feedback to a peer on interaction skills and suggest some strategies for improvement (written and spoken feedback)

Reflection on the Unit Plan

At the conclusion of the unit teachers can reflect on the unit for future planning by answering the following questions:
What worked well in this unit?
What was a stumbling block?
How would you refine it?
What trends and gaps in learning have you identified?
How will you build on these learning experiences next term and beyond?



APPENDIX >

Slide 1: Look! Up In The Sky. Year 6 - Helping Australia Shrink

Slide 2: About the RFDS

- Started in 1928 by Rev John Flynn OBE. Flynn was a Teacher and a Missionary.
- Provide a 24hr Emergency Service to Rural and Isolated Communities.
- Started the School of the Air in Alice Springs in 1927 where students had their classes by radio.
- The first flight was in a single engine, biplane and radio plane named Victory.
- John Traeger invented the Padel Radio on November 11th 1938. It allowed people to talk to the RFDS.
- Provide Primary Health Care to Rural and Isolated Communities.

Slide 3: The history of the Royal Flying Doctor Service

- 1925 Founder - Rev John Flynn OBE
- 1928 First Flight - Radio plane called Victory
- 1938 Padel Radio - Invented by John Traeger in 1938
- 1938 Where does it hurt? Body Chart - Sister Lucy Garlick, 1931 still used today.
- 1938 Flynn's Padel Radio - Originally called an aerial
- 1938 Compass similar to those used by Flynn's Padel Radio

Slide 4: About the RFDS in Tasmania

- Today, provide Aeromedical transfers to, and between hospitals.
- Today, provide primary health care to areas not able to access services.
- The RFDS was established in Tasmania in 1960 sharing planes from the New Guinea, South Australia and Victoria 1966.
- RFDS provides Vehicle Checks which screen medicine and emergency items.
- 20 primary care and 1000+ services in Tasmania a week.
- Started to provide 24hr emergency care and patient transfers between hospitals.

Average Distances Travelled in an Hour			
Mode of Transport	Conditions		
Person	Walking – 5km/hr	Jogging – 10km/hr	
Horse	Walk - 6.4km/hr	Trot - 22km/hr	Canter – 44km/hr
Motor Bike	35km/hr (average for bad roads and long distance)		
Modern Farm Ute / Car	In Town - 50km/hr	Dirt Roads 80km/hr	Good Highway 110km/hr

Outback Industries Flow Chart

Industries that operate in Australia's Outback



Provide us with

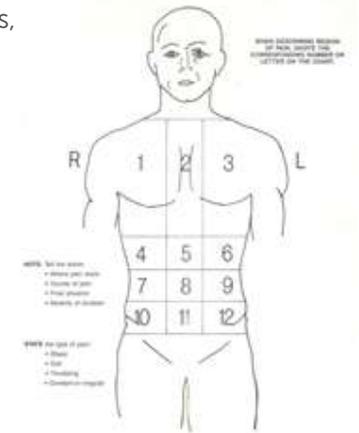
How we use these products

How these products benefit Australia's Economy

Observation of Mel >

Use the RFDS Body chart to describe Mel's Injuries,

WHERE DOES IT HURT?



NOW	THEN
Mel is airlifted by the Royal Flying Doctor Service to Alive Springs Hospital	
Mel is traveling across a farming property on a motorbike. The wheel gets stuck in a wombat hole and she is thrown from the bike.	Mel is riding a horse across a paddock in 1880. Its leg gets stuck in a wombat hole and she is thrown to the ground.
What are some of the challenges Mel might have faced in getting help in 1880	

THINK PAIR SHARE ROUTINE

A routine for active reasoning and explanation

Think Pair Share involves posing a question to students, asking them to take a few minutes of thinking time and then turning to a nearby student to share their thoughts.

Purpose: What kind of thinking does this routine encourage?

This routine encourages students to think about something, such as a problem, question or topic, and then articulate their thoughts. The Think Pair Share routine promotes understanding through active reasoning and explanation. Because students are listening to and sharing ideas, Think Pair Share encourages students to understand multiple perspectives.

Application: When and Where can it be used?

Think Pair Share can be applied at any given moment in the classroom. For example, when approaching a solution, solving a math problem, before a science experiment, or after reading a passage or chapter of a book you may ask students to take a moment to think about a particular question or issue and then turn to their neighbor and share their thoughts. Sharing can also be done in small groups. Some times you will want to have pairs or groups summarize their ideas for the whole class.

Launch: What are some tips for starting and using this routine?

When first introducing the routine, teachers may want to scaffold students' paired conversations by reminding them to take turns, listen carefully and ask questions of one another. One way to ensure that students listen to each other is to tell students that you will be calling on individuals to explain their partners thinking, as opposed to telling their own thoughts.

Encourage students to make their thinking visible by asking them to write or draw their ideas before and/or after sharing. Journals can also be useful. Student pairs can report one another's thoughts to the class and a list of ideas can be created in the classroom.

This routine is adapted from Frank Lyman: Lyman, F. T. (1981). The Responsive Classroom Discussion: The Inclusion of All Students. In A. Anderson (ED), Mainstreaming Digest (PP. 109-113). College Park: University of Maryland Press.

SEE / THINK / WONDER

A routine for exploring works of art and other interesting things

1. What do you **see**?
2. What do you **think** about that?
3. What does it make you **wonder**?

Purpose: What kind of thinking does this routine encourage?

This routine encourages students to make careful observations and thoughtful interpretations. It helps stimulate curiosity and sets the stage for inquiry.

Application: When and Where can it be used?

Use this routine when you want students to think carefully about why something looks the way it does or is the way it is. Use the routine at the beginning of a new unit to motivate student interest or try it with an object that connects to a topic during the unit of study. Consider using the routine with an interesting object near the end of a unit to encourage students to further apply their new knowledge and ideas.

Launch: What are some tips for starting and using this routine?

Ask students to make an observation about an object--it could be an artwork, image, artifact or topic--and follow up with what they think might be going on or what they think this observation might be. Encourage students to back up their interpretation with reasons. Ask students to think about what this makes them wonder about the object or topic.

The routine works best when a student responds by using the three stems together at the same time, i.e., "*I see..., I think..., I wonder...*" However, you may find that students begin by using one stem at a time, and that you need to scaffold each response with a follow up question for the next stem.

The routine works well in a group discussion but in some cases you may want to ask students to try the routine individually on paper or in their heads before sharing out as a class. Student responses to the routine can be written down and recorded so that a class chart of observations, interpretations and wonderings are listed for all to see and return to during the course of study.

THINK / PUZZLE / EXPLORE

A routine that sets the stage for deeper inquiry

1. What do you think you know about this topic?
2. What questions or puzzles do you have?
3. What does the topic make you want to explore?

Purpose: What kind of thinking does this routine encourage?

This routine activates prior knowledge, generates ideas and curiosity and sets stage for deeper inquiry.

Application: When and Where can it be used?

This routine works especially well when introducing a new topic, concept or theme in the classroom. It helps students take stock of what they already know and then pushes students to identify puzzling questions or areas of interest to pursue. Teachers can get a good sense of where students are on a conceptual level and, by returning to the routine over the course of study, they can identify development and progress. The third question is useful in helping students lay the ground work for independent inquiry.

Launch: What are some tips for starting and using this routine?

With the introduction of new topic - for example, earth, leaves, fractions, Buddhism - the class can engage in the routine together to create a group list of ideas. Between each phase of the routine, that is with each question, adequate time needs to be given for individuals to think and identify their ideas. You may even want to have students write down their individuals ideas before sharing them out as a class. In some cases, you may want to have students carry out the routine individually on paper or in their heads before working on a new area.

Keep a visible record of students' ideas. If you are working in a group, ask students to share some of their thoughts and collect a broad list of ideas about topic on chart paper. Or students can write their individual responses on post-it notes and later add them to a class list of ideas.

Note that it is common for students to have misconceptions at this point—include them on the list so all ideas are available for consideration after further study. Students may at first list seemingly simplistic ideas and questions. Include these on the whole class list but push students to think about things that are truly puzzling or interesting to them.

WHAT MAKES YOU SAY THAT

Interpretation with Justification Routine

1. What's going on?
2. What do you see that makes you say that?

Purpose: What kind of thinking does this routine encourage?

This routine helps students describe what they see or know and asks them to build explanations. It promotes evidential reasoning (evidence-based reasoning) and because it invites students to share their interpretations, it encourages students to understand alternatives and multiple perspectives.

Application: When and where can I use it?

This is a thinking routine that asks students to describe something, such as an object or concept, and then support their interpretation with evidence. Because the basic questions in this routine are flexible, it is useful when looking at objects such as works of art or historical artifacts, but it can also be used to explore a poem, make scientific observations and hypothesis, or investigate more conceptual ideas (i.e., democracy). The routine can be adapted for use with almost any subject and may also be useful for gathering information on students' general concepts when introducing a new topic.

Launch: What are some tips for starting and using this routine?

In most cases, the routine takes the shape of a whole class or group conversation around an object or topic, but can also be used in small groups or by individuals. When first introducing the routine, the teacher may scaffold students by continually asking the follow-up questions after a student gives an interpretation. Over time students may begin to automatically support their interpretations with evidence with out even being asked, and eventually students will begin to internalize the routine.

The two core questions for this routine can be varied in a number of ways depending on the context: What do you know? What do you see or know that makes you say that? Sometimes you may want to precede students' interpretation by using a question of description: What do you see? or What do you know?

When using this routine in a group conversation it may be necessary to think of alternative forms of documentation that do not interfere with the flow of the discussion. One option is to record class discussions using video or audio. Listening and noting students' use of language of thinking can help you see their development. Students words and language can serve as a form of documentation that helps create a rubric for what makes a good interpretation or for what constitutes good reasoning.

Another option is to make a chart or keep an ongoing list of explanations posted in the classroom. As interpretations develop, note changes and have further discussion about these new explanations. These lists can also invite further inquiry and searches for evidence. Other options for both group and individual work include students documenting their own interpretations through sketches, drawings, models and writing, all of which can be displayed and revisited in the classroom.



Assessment Task Sheet > Museum Exhibit

Helping Australia Shrink

The royal flying doctor service is building a new section onto their museum in broken hill called 'Helping Australia Shrink' about the services they provide for the 'Australian Inlanders'.

Every month, a school is asked to provide exhibits for the new area.



Task

Your task is to develop a piece for inclusion in your class's exhibition. Remember that it needs to clearly communicate the methods used by the RFDS to bring people together and help those in the outback access vital service. Use your research in the virtual museum to help you identify your chosen theme.

Requirements

- > Clearly identify your chosen theme and provide appropriate background information to ensure your audience has some knowledge of their contribution / history.
- > Collect and collate information and data from multiple sources to develop your response to the task.
- > Clearly communicate how your chosen theme has helped Australia to 'Shrink'.
- > Consider how you will present your information to enhance your class's exhibit.
- > Some example presentation methods - Interpretive text panel with annotated images, Model with audio recording, Object, A short video or animation, Visitor podcast, Brochure

Assessment Task Sheet > Museum Exhibit

Helping Australia Shrink

The royal flying doctor service is building a new section onto their museum in broken hill called 'Helping Australia Shrink' about the services they provide for the 'Australian Inlanders'.

Every month, a school is asked to provide exhibits for the new area.



Task

Your task is to develop a piece for inclusion in your class's exhibition. Remember that it needs to clearly communicate the methods used by the RFDS to bring people together and help those in the outback access vital service. Use your research in the virtual museum to help you identify your chosen theme.

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	Way above level	Above Level	At level	Is approaching the standard expected	Is performing below the standard expected
Content	Information identifies, explains and provides examples to demonstrate the significance of the contribution of the RFDS to the development of Australian society since Federation.	Information clearly identifies and explains the significance of the contribution of the RFDS to the development of Australian society since Federation.	Information identifies the contribution of the RFDS to the development of Australian society since Federation.	Information collected attempts to identify the contribution of the RFDS to the development of Australian society since Federation.	Information is irrelevant or incomplete
Researching	Independently develops detailed and thorough questions to guide an inquiry process.	Independently develops appropriate questions to guide an inquiry process.	Develops appropriate questions to guide an inquiry process.	Student requires prompts to generate questions to guide an inquiry process.	Questions to guide an inquiry process are teacher generated or incomplete.
	Locates and collects detailed, relevant information and data from primary and secondary sources.	Locates and collects relevant information and data from primary and secondary sources.	Locates and collects relevant information and data from primary and secondary sources	With assistance, locates and collects some relevant information from a primary source.	Collection of information is teacher guided or incomplete.
Generic Structure	Independently plans, and deliver presentations, carefully selecting multimodal elements for defined audiences and purposes, making choices for modality and emphasis that add to the meaning.	Independently plans, and delivers presentation, selecting appropriate multimodal elements for defined audiences and purposes, making appropriate choices for modality and emphasis.	Plans, and delivers presentation, selecting appropriate multimodal elements for defined audiences and purposes, making appropriate choices for modality and emphasis.	With assistance, plans, and delivers presentation, selecting appropriate multimodal elements for defined audiences and purposes, making a appropriate choices for modality and emphasis.	Ideas for presentation are teacher generated, or presentation is incomplete.
	Sequencing of information about people’s lives, events and developments using a variety of methods, including timelines, adds meaning to presentation.	Independently sequences information about people’s lives, events and developments using a variety of methods including timelines.	Sequences information about people’s lives, events and developments using a variety of methods including timelines.	With assistance, sequences information about people’s lives, events and developments using a variety of methods including time-lines.	
Grammar and Spelling	Punctuation, grammar and spelling are correct. Text is error free. Uses a variety of sentence structures to convey meaning and add interest.	Independently identifies and corrects punctuation and grammar errors and improves sentence structure throughout the editing process.	Identifies and corrects punctuation and grammar errors and improves sentence structure throughout the editing process.	With assistance has made an effort to correct errors throughout the editing process.	Little effort editing, text contains many errors or is teacher corrected.

Presentation	Independently presents ideas, findings, viewpoints and conclusions in a range of texts and modes that incorporate source materials, digital and non-digital representations and discipline-specific terms and conventions.	Independently presents ideas, findings, viewpoints and conclusions in a range of texts and modes that incorporate source materials, digital and non-digital representations and discipline-specific terms and conventions.	Presents ideas, findings, viewpoints and conclusions in a range of texts and modes that incorporate source materials, digital and non-digital representations and discipline-specific terms and conventions.	With assistance presents ideas, findings, viewpoints and conclusions in a range of texts and modes that incorporate source materials, digital and non-digital representations and discipline-specific terms and conventions.	Presentation is teacher generated or incomplete.
Aesthetic appeal	Independently organises and represents data in a range of formats including tables, graphs and large- and small-scale maps, using discipline-appropriate conventions. Layout is visually appealing and adds meaning to the text.	Independently organises and represents data in a range of formats including tables, graphs and large- and small-scale maps, using discipline-appropriate conventions. Layout is visually appealing and easy to follow.	Organises and represents data in a range of formats including tables, graphs and large- and small-scale maps, using discipline-appropriate conventions.	With assistance organises and represents data in a range of formats including tables, graphs and large- and small-scale maps, using discipline-appropriate conventions.	Information is poorly presented, incomplete or teacher generated.

Self Assessment _____

I am particularly pleased with: _____

The part I enjoyed the most was: _____

I need to work on: _____

A new idea I had for next time is: _____

Comments _____





Royal Flying Doctor Service