

BROOKE PENA & NATALIE CAHILL

Weather and Me

Daily and seasonal changes in our environment, including the weather, affect everyday life.

Year: Foundation

Duration: 8 weeks

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2.0 Backward Design Unit

Unit: Science	Year: Foundation	Strand: Weather
<p>Outcomes: From this unit students will be able to address the four different seasons that affect our weather season. Students will also learn about reading the weather, temperature, wind and other cultures weather.</p>		
PHASE	ACTIVITIES	
<p>EVALUATE</p>	<p><i>What do you want the students to know? What representations will provide evidence that they understand the concepts?</i></p> <ul style="list-style-type: none"> ▪ We want students to know that there are four different seasons and with each season the weather changes and can affect our daily routine and surroundings. ▪ The way the students will be able to show their learning will be through an oral presentation with an attached diorama. <p><i>What do you want the students to be able to do? How will they demonstrate this?</i></p> <ul style="list-style-type: none"> ▪ Students should be able to differentiate between the four seasons and how the weather can affect their daily routine and surroundings. ▪ The way in which students will demonstrate this is through the information collected in their work booklets, participation and their oral presentation. 	
<p>ELABORATE</p>	<p><i>What student investigation/s or application of knowledge would extend their understanding? Representations?</i></p> <ul style="list-style-type: none"> ▪ The way students will be able to extend their knowledge would be through the use of ICT research lessons and information books from the library. 	
<p>EXPLAIN</p>	<p><i>What are the current scientific explanations? How best can the students represent their understanding?</i></p> <ul style="list-style-type: none"> ▪ The resource that will be used throughout the duration of this unit will be the Bureau of Meteorology. 	
<p>EXPLORE</p>	<p><i>What hands-on, shared experiences of the phenomenon are appropriate? Representations?</i></p> <ul style="list-style-type: none"> ▪ Students will be involved in many hands-on activities for this unit some of these include observation of the schoolyard, sketching the schoolyard landscape into their work booklets, using the interactive whiteboard to find out the local weather forecast and the creation of the students diorama. 	
<p>ENGAGE</p>	<p><i>How can we engage students and elicit their prior knowledge? Representations?</i></p> <ul style="list-style-type: none"> ▪ Students will be asked many questions in which to find out information they may already know, this will then lead into a classroom discussion. They will be introduced to the work booklet that they will complete over the 8 week duration and lastly they will complete a KWL chart as a class so that they can refer back to it whenever new knowledge is learnt. 	

3.0 Unit at a Glance

Phase	Lesson	At a glance
ENGAGE	Lesson 1 Our weather	Draw on prior knowledge by posing questions to the students about weather, engage in discussion. Begin a word wall and a KWL chart for student reference. Introduce the work booklet for the unit.
	Lesson 2 My world outside	Explore the schoolyard surroundings, whilst using their senses. Sketch the landscape of a selected area, making sure to include the sun, clouds, trees, grass, flowers, etc. Students will then sketch the other three seasons into their work booklets as to what they think it would look like.
EXPLORE	Lesson 3 My weather and yours	Students will compare and contrast the sketches they created in the prior lesson to images on the interactive whiteboard. Also including weather conditions in other cultures.
	Lesson 4 Too hot, too cold	Students will be able to view the difference in temperature and record their findings in their work booklet.
EXPLAIN	Lesson 5 How weather affects me	Summarise content knowledge in work booklets. Explore the cause and affects of weather conditions to their everyday lives, including activities, clothes, animals, etc.
ELABORATE	Lesson 6 What's in the wind?	Students will conduct and investigate on wind strength and what exactly is in the wind.
	Lesson 7 Creating presentation diorama	Students will create their diorama using crafts from the craft table and key words from the word wall.
EVALUATE	Lesson 8 Oral presentation with the aid of a diorama	Students will present to the class their diorama on a specific season.

4.0 Australian Curriculum: Science

Strand	Sub-strand	Code	Foundation Year content descriptions	Lessons
Science Understanding (SU)	Earth and space sciences	ACSU004	Daily and seasonal changes in our environment, including the weather, affect everyday life.	1-6
Science as a Human Endeavour (SHE)	Nature and development of science	ACSHE013	Science involves exploring and observing the world using the senses.	2,3,5,6
Science Inquiry Skills (SIS)	Questioning and predicting	ACSIS014	Respond to questions about familiar objects and events.	1-6
	Planning and conducting	ACSIS011	Explore and make observations by using the senses.	2-6
	Processing and analysing data and information	ACSIS233	Engage in discussions about observations and use methods such as drawing to represent ideas.	1-8
	Communicating	ACSIS012	Share observations and ideas.	1-8

5.0 Australian Curriculum: General Capabilities

General Capabilities	Content Description
Literacy	<ul style="list-style-type: none"> ▪ Students develop literacy capability as they learn how to construct an understanding of how scientific knowledge is produced; to explore, analyse and communicate scientific information, concepts and ideas; and to plan, conduct and communicate investigations. ▪ Scientific vocabulary is often technical and includes specific terms for concepts and features of the world, as well as terms that encapsulate an entire process in a single word, such as 'photosynthesis'.
Numeracy	<ul style="list-style-type: none"> ▪ Numeracy involves students in recognising and understanding the role of mathematics in the world and having the dispositions and capacities to use mathematical knowledge and skills purposefully.
Information and Communication Technology (ICT) capability	<ul style="list-style-type: none"> ▪ Students develop ICT capability as they learn to use ICT effectively and appropriately to access, create and communicate information and ideas, solve problems and work collaboratively in all learning areas at school, and in their lives beyond school. ▪ ICT capability involves students in learning to make the most of the technologies available to them, adapting to new ways of doing things as technologies evolve and limiting the risks to themselves and others in a digital environment.
Critical and creative thinking	<ul style="list-style-type: none"> ▪ In the Science learning area, critical and creative thinking are embedded in the skills of posing questions, making predictions, speculating, solving problems through investigation, making evidence-based decisions, and analysing and evaluating evidence.
Personal and social capability	<ul style="list-style-type: none"> ▪ The personal and social capability involves students in a range of practices including recognising and regulating emotions, developing empathy for and understanding of others, establishing positive relationships, making responsible decisions, working effectively in teams and handling challenging situations constructively.
Ethical understanding	<ul style="list-style-type: none"> ▪ Students develop the capacity to form and make ethical judgments in relation to experimental science, codes of practice, and the use of scientific information and science applications.
Intercultural understanding	<ul style="list-style-type: none"> ▪ The capability involves students in learning about and engaging with diverse cultures in ways that recognise commonalities and differences, create connections with others and cultivate mutual respect.

6.0 Australian Curriculum: Cross Curriculum Priorities

Cross Curriculum Priorities	Content Description
Aboriginal and Torres Strait Islander histories and cultures	<ul style="list-style-type: none">▪ The Aboriginal and Torres Strait Islander priority provides opportunities for all learners to deepen their knowledge of Australia by engaging with the world’s oldest continuous living cultures. This knowledge and understanding will enrich their ability to participate positively in the ongoing development of Australia.▪ Students will have opportunities to learn that Aboriginal and Torres Strait Islander Peoples have developed knowledge about the world through observation, using all the senses; through prediction and hypothesis; through testing (trial and error); and through making generalisations within specific contexts. These scientific methods have been practised and transmitted from one generation to the next. Students will develop an understanding that Aboriginal and Torres Strait Islander Peoples have particular ways of knowing the world and continue to be innovative in providing significant contributions to development in science. They will investigate examples of Aboriginal and Torres Strait Islander science and the ways traditional knowledge and western scientific knowledge can be complementary.

7.0 Assessment Overview

Assessment Type	What will be assessed
Diagnostic	Students ability to: <ul style="list-style-type: none">▪ Reflect on their prior knowledge▪ Involvement in class discussion
Formative	Students ability to: <ul style="list-style-type: none">▪ Distinguish the difference between the four seasons▪ Understand other cultures weather patterns and ways of collecting data▪ Describe the affects weather has on everyday life
Summative	Students ability to: <ul style="list-style-type: none">▪ Speak fluently to peers whilst presenting diorama▪ Create a diorama which includes all aspects that relate specifically to that season

8.0 Assessment Rubric

Criteria	Exceeded	Achieved	Partially Achieved
<p><i>Understanding of content</i></p> <ul style="list-style-type: none"> ▪ Season ▪ Key components of season 	<p>Student clearly identifies season and knowledge.</p> <p>Student presents copious amounts of information related to the weather season.</p>	<p>Student identifies knowledge and understands of season.</p> <p>Student depicts a range of knowledge and factors related to the season.</p>	<p>Student partially understands the season.</p> <p>Student displays minimal knowledge of season.</p>
<p><i>Diorama</i></p> <ul style="list-style-type: none"> ▪ Shows correct season ▪ Correct colours and animations of the season 	<p>Student demonstrates a complete understating and design of season.</p> <p>Student has used many colours, demonstrations, or animations of key components.</p>	<p>Student shows correct season.</p> <p>Student has used minimal colour, demonstration, or animations of key components.</p>	<p>Student shows some correct aspects of season.</p> <p>Student has used minimal colour, demonstration, or animations of key components.</p>
<p><i>Communication</i></p> <ul style="list-style-type: none"> ▪ Speaks clearly ▪ Uses eye contact ▪ Uses diorama to talk about the season chosen 	<p>Student addresses students confidently.</p> <p>Student makes excellent use of the diorama in expressing information about the season.</p> <p>Student always uses eye contact.</p>	<p>Student addresses students comfortably.</p> <p>Student uses diorama in expressing information about the season.</p> <p>Student uses frequent eye contact.</p>	<p>Student addresses students nervously.</p> <p>Student has minimal use of diorama in expressing information about the season.</p> <p>Student uses some eye contact.</p>

9.0 Teacher Background Information

Seasons

A season is a sub division of the year marked by changes in weather, ecology, and hours of daylight. There are four different seasons these are summer, winter, autumn and spring (Spilsbury, 2007). Seasons are marked by changes in the intensity of sunlight that reaches the Earth's surface, variations, which cause animals to go into hibernation or to migrate, and plants to be dormant. Daily changes in the weather are due to wind change and storms. Seasonal changes are due to the Earth revolving around the sun and the position of the planet (Roslyn Kay, 2008).

Wind

Wind is the flow of gases in the atmosphere on a larger scale. Winds are often referred to the speed and direction in which it is blowing at the time (Parker, 1990). Weather effects create high- and low-pressure zones, called highs and lows. It spirals due to the Coriolis Effect, producing the shifting winds we experience from day to day. Often there are many objects and things that are blown through the wind this include but are not limited to dirt, insects, rubbish etc. Short bursts of wind moving at high speeds are known as gusts. Many sports and recreational activities make use of the wind, these include kite boarding, wind surfing, sailing and paragliding (Snedeker, 2012).

Temperature

Temperature is the degrees that are measured which could be both hot and cold and measured by a thermometer. Temperature in Australia is measured in Celsius (Spilsbury, 2007). Recent increases in the Earth's temperature have been linked to human activity such as the burning of fossil fuels. Depending on the speed and direction of the wind can make the temperature drop and the body temperature get colder (Snedeker, 2012). This causes humans to change clothes to suit the temperature of the day and affects the activities during the day depending on the degrees and temperature of the weather (Roslyn Kay, 2008). Often due to extreme temperatures both hot and cold, landscapes can be affected by drought, floods, and some eco systems may become dormant or extinct in extreme case. Due to the ecological effects due to the ever-changing temperature, communities are also impacted due to temperature. Some crops may not grow, water might be scarce and everyday activities may be cancelled.

Weather effects on everyday life

On a daily basis it can affect choices we make about whether to walk or take the car, what clothes we wear and whether outdoor events (Parker, 1990). The weather also effects what clothes are worn for example it is unrealistic if you wear a jumper on a 40-degree day. Classroom activities such as sport could also be affected by the weather. Choosing to play outside or play inside the classroom on lunch breaks is also very much dependent on the weather. Communities' are often the most affected by the weather. Floods, drought, cyclones are all experienced throughout Australia (Snedeker, 2012). They create hardships to the communities that are affected by the weather, some examples include low or no water supply, and food supply may stop or sour depending on the weather system. Weather is one of the most factored parts on a daily basis without even recognizing. The effects of weather can be a blessing or a disaster, an effects everybody in their everyday lives.

10.0 Students' Misconceptions

When creating a unit of work it is important to take into consideration the prior knowledge that some of your students may already have. This prior knowledge however may not actually be correct and could just be what students feel is right in relation to the topic. With the unit being based upon weather students may misinterpret what some of the important facts really are.

The first misconception students may have could be that there is only one season when in actual fact there are four. However to a younger student they may not know all the names of the season and may know one or even none. Another misconception could be about the daily weather that we live with everyday, some students may assume that no matter what type of weather is being produced outside that they would be able to continue their normal routine. For example if they want to play outside on a nice hot day, this would be acceptable however if it was a wet and windy day they most likely would not be able to do the same.

Students may also think that weather has nothing to do with science due to it being something that happens in the sky not something that happens in a science room. Another misconception may be that students think that there is someone actually controlling the weather and making it change, when in actual fact it is the different reactions that are taking place in the Earth's atmosphere.

11.0 Sequential Lesson Overview

11.1 Lesson 1: Our Weather

Short Overview

In this lesson the teacher will pose questions that will distinguish and discover student's prior knowledge on weather. Students will be introduced to a KWL chart that students will pose questions, draw from prior knowledge, and return to this chart throughout the unit. Teacher and students will pose questions about weather and engage in discussion about key words, what is weather, and how it is measured etc. Students will begin to create a word wall for this unit and display this in the classroom as a resource tool for the students. Students will be introduced to the work booklet that they will be using throughout the unit. Students will be walked through the procedure used to start each lesson off, this will create a routine for lessons to come.

Lesson /Assessment Focus

Observation: Teacher begins an anecdotal record of students:

- Class discussion
- Think pair and share
- Classroom involvement

Key Outcomes

- Gain an understanding of prior knowledge in relation to weather.
- Begin to conduct a routine at the beginning of each lesson in the unit.
- Use communication and group work to extend on prior knowledge.
- Use KWL chart to pose questions students wish to learn.
- Students learn to read and identify key words that relate to weather.
- Students will be able to record the degrees of temperature.

Required Equipment

- Word wall
- KWL chart
- Work booklet
- Coloured pencils
- Textas
- Interactive whiteboard

Lesson Steps

1. Start the day off with reading the weather forecast from the Bureau of Meteorology website using the interactive whiteboard. Make sure students identify all the key words on the web page, if any words seen are not all ready on the Word Wall these should be added to it.
2. The teacher asks students to describe what the weather is like today looking outside and then compare student's observations to the BOM website.
3. Students begin by recording the degrees on the classroom thermometer on the whiteboard.

4. Students are then asked to pick out any key words they see on the website and the teacher then begins using a texta to write these words on the word wall.
5. Teacher then asks students if there are any other words they can think of which relate to weather to add to the word wall.
6. Teacher then draws a KWL chart.
7. The teacher asks students in pairs to discuss what they know already about weather in their world (Teacher gives a few minutes for this step).
8. Teacher then asks students to share 'what they know' and write this information on the KWL chart under 'what they already know'.
9. Teacher then asks to pick a different partner and discuss what students 'would like to know' throughout this unit. These are written under 'what they want to know' in questions.
10. Students are introduced to their workbook for the unit.

11.2 Lesson 2: My world outside

Short Overview

In this lesson students will have the opportunity to explore their school yard surroundings observing the weather such as the sun, any clouds, rain, wind, shadows etc. Students will discuss what they observe using their senses and will draw their observation in their work booklet. Students will then discuss the different season and the characteristics on the season and write any interesting words and add them to their word wall. Students will then draw their observations again however adjusting their drawing to the characteristics of the three other seasons. Students will show and discuss their final four drawings.

Lesson /Assessment Focus

- Observation of student's classroom involvement
- Collection and marking of workbooks
- Observation and anecdotal record taken of enthusiasm in pairs and groups

Key Outcomes

- Use student's surroundings to identify weather.
- Students display drawing to depict their understandings.
- Students work in groups to communicate their findings and discuss seasons.
- Teacher poses questions for students to question.
- Students learn to read and identify key words that relate to weather.
- Students will be able to record the degrees of temperature.

Required Equipment

- Interactive whiteboard
- Work booklet
- Pencils
- Texta
- Word wall

Lesson Steps

1. Start the day off with reading the weather forecast from the Bureau of Meteorology website using the interactive whiteboard. Make sure students identify all the key words on the web page, if any words seen are not all ready on the Word Wall these should be added to it.
2. The teacher asks students to describe what the weather is like today looking outside and then compare student's observations to the BOM website.
3. Students begin by recording the degrees on the classroom thermometer on the whiteboard.
4. Teacher asks students how they think Indigenous Peoples told and examined the weather.
5. Students in groups discuss this and present what they spoke about to the class.
6. Teacher explains that students will be going outside this lesson to observe the weather using their senses.
7. Students take their workbooks and a pencil outside and discuss what they see feel, look, taste etc. And they talk about these observations as a class.

- 8.** The teacher then directs students to draw what they see in their workbooks on the first page.
- 9.** Teacher then brings students inside and in pairs they show and compare each other's drawings and talk about them.
- 10.** Teacher then asks students to think about the other three seasons and sketch their drawing they just drew but adjust their drawing to what they think it would look like in each of the different season. These drawing are to be drawn in the workbook.
- 11.** Students discuss what they drew and compare drawings as a class and discuss why their drawings are similar or different.

11.3 Lesson 3: My weather and yours

Short Overview

In this lesson students will compare and contrast students sketches they sketched in the prior lesson to the images and information they are provided with about the seasons summer, winter, autumn, and spring. Students will also discuss the comparisons between the different seasons in different cultures.

Lesson /Assessment Focus

- Observation of classroom discussion
- Observation of group work activities
- Collection and marking of ongoing workbooks

Key Outcomes

- Students communicate posed questions by teachers through social interaction.
- Students understand that seasons around the world are different then in Australia.
- Students learn to read and identify key words that relate to weather.
- Students will be able to record the degrees of temperature.

Required Equipment

- Interactive whiteboard
- Pictures
- Workbooks
- Pencils

Lesson Steps

1. Start the day off with reading the weather forecast from the Bureau of Meteorology website using the interactive whiteboard. Make sure students identify all the key words on the web page, if any words seen are not all ready on the Word Wall these should be added to it.
2. The teacher asks students to describe what the weather is like today looking outside and then compare student's observations to the BOM website.
3. Students begin by recording the degrees on the classroom thermometer on the whiteboard.
4. Teacher begins to discuss information regarding the seasons (Summer, winter, autumn and spring).
5. Teacher provides pictures of each of the seasons and asks students to discuss what they see in the photo (This could be colours, shadows, wind etc).
6. Teacher then asks students to look at the pictures they drew in the previous lesson and discuss in groups what they could change now that they understand more about the different seasons.
7. Teacher leads a class discussion about what students would change in their drawings about each season.
8. Teacher then looks at pictures of the seasons but through different cultures.
9. Students then compare and contrast how weather and season in Australia are different to those in other cultures and countries.
10. Students are to then pick a season in another country and draw this in their work booklets.

- 11.** Students present their drawings to the class and point out specific details they need in their drawings and discuss differences they think about the season in comparison to Australia.

11.4 Lesson 4: Too hot, too cold

Short Overview

In this lesson students will look at the different temperatures that they have recorded everyday throughout the unit. Students will discuss their results in the class and the teacher will pose questions as to why temperatures rise and fall.

Lesson /Assessment Focus

- Observation and anecdotal record of classroom discussion
- Observation of involvement in group work
- Collection and marking of temperature page in workbooks

Key Outcomes

- Students learn to read and identify key words that relate to weather.
- Students will be able to record the degrees of temperature.
- Students investigate the rise and fall of temperature and the factors that affect temperature.

Required Equipment

- Workbook
- Interactive whiteboard

Lesson Steps

1. Start the day off with reading the weather forecast from the Bureau of Meteorology website using the interactive whiteboard. Make sure students identify all the key words on the web page, if any words seen are not all ready on the Word Wall these should be added to it.
2. The teacher asks students to describe what the weather is like today looking outside and then compare student's observations to the BOM website.
3. Students begin by recording the degrees on the classroom thermometer on the whiteboard.
4. Teacher begins to discuss information regarding the seasons (Summer, winter, autumn and spring).
5. Teacher leads class discussion and questions to the class about why the temperature in weather changes.
6. Teacher asks if there are any words that students know in relation to temperature that they can contribute to the class word wall.
7. Teacher shows the students a video about why weather changes.
8. Students think pair and share their thoughts about the changes in temperature and the video.
9. Students open their workbooks and discuss in pairs their results (Why did the weather go up on one day and down the next?).
10. Teacher refers back to the KWL chart.
11. Students observe the column what they wanted to know and change any questions that have been answered and write these in the 'what they know' column.
12. Students in pairs discuss any other questions they would like to know and the teacher will write these in the 'want to know' column.
13. Teacher asks students to open to the new temperature page.

- 14.** The teacher reads out the a made up weather forecast such as strong winds and rain and students draw up the temperature gage at what they estimate the decrease would be.
- 15.** This step is repeated 4 times.
- 16.** Students discuss their answers in groups.
- 17.** Collection of workbooks to mark student work to date.

11.5 Lesson 5: How weather affects me

Short Overview

Throughout this lesson students will be able to summarise the information in which they already know about the four different seasons. This information should be taken down in their work booklets. To end the class, students should have a discussion on some of the information they may have written or drawn in their table for each of the seasons.

Lesson/Assessment Focus

- Observation of classroom discussion
- Observation of students summarisation skills

Key Outcomes

- Students will be able to record the degrees of temperature.
- Students will learn to read and identify key words that relate to weather.
- Students will be able to summarise each of the seasons.

Required Equipment

- Interactive whiteboard
- Work booklets

Lesson Steps

1. Start the day off with reading the weather forecast from the Bureau of Meteorology website using the interactive whiteboard. Make sure students identify all the key words on the web page, if any words seen are not all ready on the Word Wall these should be added to it.
2. The teacher asks students to describe what the weather is like today looking outside and then compare student's observations to the BOM website.
3. Students begin by recording the degrees on the classroom thermometer on the whiteboard.
4. Explain to students that through this lesson they will be summarising what they know and have learnt so far.
5. In their work booklets students will fill out a table in which they can draw or write down images or words that relate to each of the seasons.
6. A class discussion should be had after the work booklet table has been completed.

11.6 Lesson 6: What's in the wind?

Short Overview

Students will have the opportunity to experiment with wind strengths. This simple experiment is done with three lids covered in petroleum jelly, each of them are hung in different spots as to how much wind they are exposed to. These are then left for the day for the students to observe. Once they have been brought back into the classroom students are given the opportunity to inspect the different characteristic that each lid now contains. The information the students find can then be put into their work booklets for future reference.

Lesson/Assessment Focus

- Observation of classroom discussion
- Observation of group activities

Key Outcomes

- Students will be able to assess wind strength.
- Students will be able to take down information in relation to wind strength.
- Students will also be able to work effectively within a group situation.

Required Equipment

- Interactive whiteboard
- A few plastic lids
- Petroleum jelly
- Magnifying glass
- Paper puncher
- Wool
- Work booklets

Lesson Steps

1. Start the day off with reading the weather forecast from the Bureau of Meteorology website using the interactive whiteboard. Make sure students identify all the key words on the web page, if any words seen are not all ready on the Word Wall these should be added to it.
2. The teacher asks students to describe what the weather is like today looking outside and then compare student's observations to the BOM website.
3. Students begin by recording the degrees on the classroom thermometer on the whiteboard.
4. Explain to the students that today they will be doing an experiment throughout the course of the day.
5. The teacher will punch a hole in each of the three lids. Wool then will be threaded through the hole to make it easier for hanging outside.
6. On each of the lids spread petroleum jelly evenly over.
7. The three lids need to be placed in three different characteristics places. Eg. One should be placed in direct wind, one should be partially covered, and the last one should be completely protected from the elements.
8. The lids are then left outside for the day and then collected.
9. Students will be able to view the different lids and write down the different characteristics of each in their work booklets.

10. The class should be involved in a class discussion at the end to understand where all students' current knowledge is on the topic.

11.7 Lesson 7: Creating presentation diorama

Short Overview

The purpose of this lesson is to give the students the opportunity to start on their dioramas. This will be done with the students already learnt knowledge from the unit so far. The diorama will be created with the use of student's drawings and craft items from the craft table, this will help to gain further insight as to what they have learnt so far. Students will also be able to use key words in their diorama that have been put on to the Word Wall. The information that will be included in the diorama will be different for each student, it is up to the student to choose a season in which they are most interested in.

Lesson/Assessment Focus

- Observation of effective behaviour from all students
- Observation of the creation of students summative piece of assessment

Key Outcomes

- Students will be able to effectively work on their diorama presentations.

Required Equipment

- Shoeboxes (students will need to bring this in from home)
- Craft items from the craft table
- Glue
- Scissors
- Coloured pencils
- Lead pencils
- Work booklets

Lesson Steps

1. Explain to students that with the new knowledge they have gained from the unit they will be completing a summative piece of assessment. Students will be creating a diorama on one of the four seasons, they will be using their own drawings, craft items from the craft table and key words from the Word Wall. This diorama is to be completed within the lesson given to them, and not taken home.
2. Have students choose a season they wish to present about and write down this information so students do not try changing their season. Make sure there are a variety of seasons, for example not just summer.
3. Once students understand what is expected of them have them collect the equipment they need and start straight away.
4. During this time quiet music can be played for the students however if behaviour and noise level escalades music will be turned off.
5. At the end of the lesson collect what students have done and get them to pack up.
6. If students did not finish their diorama they will be given the opportunities to finish during free time.

11.8 Lesson 8: Oral presentation with the aid of a diorama

Short Overview

Students will be presenting their already created dioramas from the previous lesson to the class. During this all students will need to give their respect to the presenter. The teacher will be looking for the students understanding of their content knowledge and also the presentation of the diorama.

Lesson /Assessment Focus

- Observation of student involvement in presentations
- Collection and marking of dioramas

Key Outcomes

- Students will be able to present their assessment in a clear and concise way.
- Students will also be able to clearly demonstrate their use of creativity in their dioramas.

Required Equipment

- Student dioramas
- Work booklets

Lesson Steps

1. Have students seated on the carpet and let them know that they will be presenting the dioramas that they created in the previous lesson. Students will need to understand that they will have to be respectful to whoever is presenting as this is something they are been marked on.
2. Explain to students that you will be looking for how well they understand their topic, also how their poster has been presented. With this the presentations can start.
3. Throughout the presentations you will need to keep an eye on the students who are watching and make sure they are doing as they need to be.
4. Once all the presentations have been concluded the teacher will place the dioramas around the classroom for other students and parents to view. The teacher will also collect all work booklets for further marking.

12.0 Reference List

Australian Curriculum, Assessment and Reporting Authority. (2012). *Foundation year: Science*. Retrieved from <http://www.australiancurriculum.edu.au/FoundationYear?a=S&layout=1>

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Roslyn Kay, W. H. (2008). *Weather and climate*. Perth: R.I.C Publications.

Snedeker, J. (2012). *The everything kids' weather book*. USA: Karen Coper.

Spilsbury, L. (2007). *Children's weather encyclopedia*. USA: Parragon Incorporated.

13.0 Appendix

13.1 Appendix 1: Equipment Required

Lesson One

- Cardboard for Word Wall
- Butchers paper for KWL chart
- Work booklet

Lesson Two

- Work booklet

Lesson Three

- Work booklet
- Interactive whiteboard

Lesson Four

- Thermometers
- Beakers
- Water
- Work booklet

Lesson Five

- Work booklet
- Interactive whiteboard

Lesson Six

- Plastic lids
- Petroleum jelly
- Magnifying glass
- Paper puncher
- Wool
- Work booklet

Lesson Seven

- Shoeboxes
- Craft items
- Glue
- Scissors
- Coloured pencils
- Lead pencils
- Work booklet

Lesson Eight

- Dioramas
- Work booklet

13.2 Appendix 2: Student Work Booklet