UNIT PLAN

Title: Moon Enquiry: What should I take to the Moon?

Outcome level(s): 3 and 4 It is anticipated that students will mostly demonstrate level 4 outcomes.

Student age: 11, 12 (QLD Year 7)

Created by: Sandy Davey. (Teachers’ Notes from staff at Sir Thomas Brisbane Planetarium)

School: Toowong State School, Brisbane

UNIT RATIONALE

In this unit the students will use their understanding of the Moon and gravity to plan an expedition to the Moon. They will investigate the principles of gravity, how the Moon causes tides, solar and lunar eclipses, phases of the Moon and traveling to the Moon using hands-on materials.

Finally, they will work with university students using video conferencing and online discussion forums to design and make an edible lunar vehicle.
Attributes of a Lifelong learner
[Pages 2, 3 & 4 QSA Science Syllabus]

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Knowledgeable person with deep understanding</td>
<td><em>Who</em> reflects on questions about the Moon in order to see how their ideas develop.</td>
</tr>
<tr>
<td>Complex thinker</td>
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<tr>
<td>Creative person</td>
<td><em>Who</em> works with others to design and make an edible lunar vehicle.</td>
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<tr>
<td>Active investigator</td>
<td><em>Who</em> explores how tides and phases of the Moon occur, how gravity and rockets work and how eclipses occur using hands on materials.</td>
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<tr>
<td>Effective communicator</td>
<td><em>Who</em> corresponds with a university student in the USA about plans for the edible lunar vehicle using a variety of ICTs.</td>
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<tr>
<td>Participant in an interdependent world</td>
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<tr>
<td>Reflective and self-directed learner</td>
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</table>
## Core learning outcomes table

[QSA Syllabus documents]

<table>
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<tr>
<th>Key Learning Area</th>
<th>Strand</th>
<th>Outcome</th>
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<tbody>
<tr>
<td>Science</td>
<td>Earth and Beyond</td>
<td>4.1 Students recognise and analyse some interactions (including the weather) between systems of Earth and beyond.</td>
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<td></td>
<td></td>
<td>4.2 Students collect information which illustrates that changes on Earth and in the solar system occur on different scales of time and space.</td>
</tr>
<tr>
<td>Science and Society</td>
<td></td>
<td>4.2 Students use the elements of a fair test when considering the design of their investigations.</td>
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</tbody>
</table>

## Aspects of ‘working scientifically’ and their components are:

[QSA Science Syllabus page 33]

<table>
<thead>
<tr>
<th>INVESTIGATING</th>
<th>UNDERSTANDING</th>
<th>COMMUNICATING</th>
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<tbody>
<tr>
<td>• making comparisons</td>
<td>• applying ideas and concepts</td>
<td>• using scientific terminology</td>
</tr>
<tr>
<td>• measuring</td>
<td>• looking for alternatives</td>
<td>• negotiating</td>
</tr>
<tr>
<td>• making and judging</td>
<td>• making comparisons</td>
<td>• describing</td>
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<tr>
<td>observations</td>
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<td>• discussing</td>
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<td>• handling materials</td>
<td></td>
<td>• discussing thinking</td>
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<tr>
<td>• designing and performing</td>
<td></td>
<td>• constructing and using models</td>
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<tr>
<td>investigations</td>
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</tbody>
</table>
## Unit overview

<table>
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<tr>
<th>STAGE</th>
<th>ACTIVITY</th>
<th>RESOURCES</th>
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</table>
| **INTRODUCTION** | Students record their ideas in a journal to be compared to their understandings at the end of the unit. Ask these questions:  
- Where is the Moon and what do you know about it?  
- What can you see of the Moon from your place in the world?  
- What patterns can you observe?  
- How do people in other parts of the world see the Moon?  
Complete a quiz about the Moon DVD/video. (Worksheet 1)  
If the video ‘Reflecting on the Moon’ is not available, distribute the questions to small groups of students to research and to report back to the class.  
Begin a word wall using Moon related words. Have students use the dictionary to locate the means of Moon related words. This could form the beginning of a glossary. (Worksheet 2) | • A video/DVD about the Moon – scientific information, history of exploration and history of related astronomy, ‘Reflecting on the Moon’  
• Worksheet 1 – ‘Moon Quiz’ related to the video.  
• Worksheet 2 – ‘Words related to the Moon.’ |
| **INVESTIGATION** | **Topic:** Gravity  
**Objectives:**  
The overall goal for this lesson is for students to observe the principles of gravity and extend their understanding of the concept through experimentation.  
Students should be able to answer the following questions: what is gravity, why does it cause objects to fall (see teachers’ note 1) towards Earth and will a heavy or light object hit the ground first if they are both dropped at the same time.  
A class discussion after the experiments have taken place will enable each student to discuss their findings and hypothesize as to why each object reacted as it did. Any new terms that arise will be added to the word bank students commenced last week. (Mass and force)  
**Procedures:**  
On the board write “If I dropped a baseball and a marble, which one would hit the ground first and why?”  
Ask the students what they think the answer will be? Write these on the board – hopefully the answers will fall into one of the three hypotheses: the heavy and light objects will hit at | • Required Materials for Experiment: 6 each of the following: Feather, Baseball, Ping Pong ball, Marble, Paperclip, Peg, Potato, Golf ball, Foam ball  
• 2 sheets of A4 paper  
• Instruction Sheet 1 – ‘What goes up must come down!’  
• Student Worksheet 1 – ‘Data Collection Sheet’  
• See the link below for |
the same time, the heavy object will hit first, the light object will hit first. The answers will be grouped on the board. 
The objects will be held up before the class. Say to the students “That is kind of odd don’t you think? I mean the baseball is heavier than the marble isn’t it, and we have these different outcomes suggested?” Students will confirm that this is the case. Pretend to ponder this and respond by saying “I think we need to experiment and see for ourselves what happens with these and other objects”.
Instruction and data collection sheets will be handed out to students. 
Directions will be read out aloud whilst students follow on their copy (as per attached copy of instruction sheet).
Check for understanding and answer any questions that students may have. Allocate approximately 20 minutes for experiment and answering questions.
Each table will be handed out a selection of objects (as listed under materials required on data collection sheet), which will be used in the experiment on gravity.
Results will be discussed – did each student have the same results why might that have been?
Ask: does gravity change? Explain that gravity remains constant, as the pull of gravity is the same for all objects; the objects hit the ground at the same time (assuming the method of release is consistent for both objects).
Ask: when the wind is blowing really hard, what is the easiest way to walk into the wind? Do you bundle up (demonstrate by bunching up and bunching down as moving forward) or do you spread your arms wide and try to walk into the wind? Which will make it easier for me to move? Take answers ask them to explain. (Should get answers like when arms are spread out the wind hits more of you – like a kite and makes it harder for you to walk – may need prompting).
Hold up a crumpled piece of paper and an unfolded sheet and ask – “pretend that this piece of paper is a person. Which one of these will hit the ground first?” (The crumpled one because there is less air hitting it)
Ask the class “why is it important to know about gravity?” Answers will be written on blackboard. Flight, space, construction, tides, weight (see teachers’ note 2)
Class might explore a web site such as:

http://www.lessonplanspage.com/ScienceSSMars7GoesUpDown.htm

Students own science books and dictionaries.
To close the lesson:
Explain that the weight of an object makes no difference to how fast it falls. The force of gravity makes everything fall at the same speed. Gravity acts with greater force on massive objects than it does on less massive objects. Very massive objects need more force to get them moving so all objects fall at the same speed. Air resistance can hold very light objects afloat longer (e.g. feathers) and work against the force of gravity but eventually these objects also come down. There is gravity on all of the other planets and Moons too. How strong the pull depends upon how massive the planet is.

Ask students to think about how the Moon’s gravitational force affects Earth.
Hand out phases of the Moon recording sheets and ask students to go out each night and draw the Moon as they see it in the sky (see teachers’ note 3). If it is cloudy draw a cloud if they see nothing leave it blank. Explain this information will be very important for the future lesson on the phases of the Moon in about 4 weeks and want to see them.

### Topic: The Moon and Tides

**Objectives:**

- The overall goal for this lesson is for students, after having read the background tides information sheet, to understand the effects of the Moon and Sun on Earth’s tides by constructing and interpreting a model of the tides experienced on a rotating Earth. Students will also graph and interpret the tides in relation to the phases of the Moon.
- Any new terms that arise will be added to the word bank students commenced in week one.

**Procedures:**

- Recall last week’s lesson on gravity and reiterate how the Moon’s gravitational pull affects Earth’s tides.
- To understand the frequency of the tides on a coastline, students cut out the stencil from the cardboard handout to make a tidal model. To make the appearance of the tide

<table>
<thead>
<tr>
<th>Required Materials:</th>
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<tbody>
<tr>
<td>Per child: Paper clip, Stencil of tide model on a cardboard piece (20cm × 25cm), Graph paper and scissors</td>
</tr>
<tr>
<td>Student Instruction Sheet 2 – ‘Instructions – cardboard Tide Model’</td>
</tr>
<tr>
<td>Student Worksheet 2 – Tidal Model</td>
</tr>
<tr>
<td>Information Sheet 2 –</td>
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</tbody>
</table>
movement more evident, students colour the sea, Earth and Moon in.

The students fasten the two cutouts together with the paper clip, with Part B on top. Holding the Moon still with one hand, the Earth can be rotated once to represent a 24-hour period.

As students rotate the Earth, they will be asked to choose one continent and observe how many low tides and high tides are experienced on the coastline during the 24 hours. (As per hand out 1)

Students should observe that there are two high tides, each followed by low tides and that high tides occur at the same time on opposite sides of the world. The bulging of the water caused by the pull of the Moon creates low tides between the high tides. Because there are four tides in 24 hours, they must occur at approximately 6 hour intervals.

Students read through the background information sheet (as per hand out 2) then to fully appreciate the movement of the tides and their relationship with the phases of the Moon, the students graph the height of the tides over a lunar month as follows:

Students draw a simple graph showing the days from 1 to 29 along the horizontal axis. On the vertical axis students mark 0 to 3m at 0.5m intervals. An example will be drawn on the blackboard.

Students should Firstly plot the high tides during a lunar month using the following data. (As per hand out 3)

Secondly, students then mark in the phases of the Moon above the high tide line. Day 1 is Full Moon, Day 8 is last quarter, Day 15 is new Moon, and Day 22 is first quarter. (see teachers’ note 4)

Students are instructed to answer these questions, which will be written on the blackboard, in their science books:

1: during which phase of the Moon is the tide the highest?
2: when is it almost as high?
3: when is it not so high?
4: what do you observe about the height of the tide during the last quarter as compared with the height during the first quarter?

Students should observe the differences in the tide height and infer that the combined influence of the Moon and Sun varies the height particularly according to the lunar phase.

‘Effect of the Moon (and Sun) on Tides’
• Instruction Sheet 3 – ‘Graphing the Tides and Moon Phases’

Students own science books, dictionaries and coloured pencils.
Thirdly, students use the same graph to plot the height of the low tides during the lunar month using the following data (as per hand out 3).

These questions should also be written on the blackboard and answered in students’ science books:

1: during which phase of the Moon is the tide lower?
2: when is it almost as low?
3: what do you observe about the height of the low tide during first and last quarters?

Students should be able to infer that the new Moon has the greatest influence on the height of high and low tide. When the Moon is positioned on the opposite side of the Earth during full Moon, the height of the tides is influenced almost as much. During first and last quarters the tides are neither very high nor very low due to the gravitational pull of both the Sun and Moon, which cancel each other out.

Discuss with students how the phases of the Moon influence tidal heights and that a new Moon (which we cannot see) has the greatest influence on the height and low tides. When the Moon is positioned on the opposite side of the Earth during a full Moon, the height of tides is influenced almost as much (Sun also has gravitational pull). During first and last quarters the tides are neither very high nor very low due to the gravitational pull of the Moon and Sun canceling each other out.

<table>
<thead>
<tr>
<th>Topic: Solar and Lunar Eclipses</th>
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<tbody>
<tr>
<td>Objectives:</td>
</tr>
<tr>
<td>The overall goal for this lesson is for students to</td>
</tr>
<tr>
<td>1: understand the differences between a solar and a lunar eclipse</td>
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<tr>
<td>2: understand how partial and total solar eclipses occur</td>
</tr>
<tr>
<td>3: understand how a lunar eclipse occurs</td>
</tr>
<tr>
<td>4: be able to demonstrate their understanding by answering a set of questions on eclipses and label correctly all parts of a solar and lunar eclipse diagram</td>
</tr>
<tr>
<td>New terms: totality, corona, partial, umbra and penumbral will be added to Moon word bank.</td>
</tr>
<tr>
<td>Procedures:</td>
</tr>
<tr>
<td>Reiterate how the Moon revolves (see teachers’ note 5) around the Earth and ask what happens when the Moon lines up directly with the Sun in front of the Earth.</td>
</tr>
<tr>
<td>• Posters to hang up in classroom: Tides</td>
</tr>
<tr>
<td>• Eclipse video/DVD “Look on the Bright Side” (If the video is not available, schedule a research session for the students, using the question worksheet)</td>
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<tr>
<td>• Video machine/DVD player/television</td>
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</tbody>
</table>
What is a solar eclipse and what causes it?
What is a lunar eclipse and what causes it?
Why are some eclipses partial and some eclipses total?

Write on the blackboard: Eclipse comes from a Greek word meaning “Abandonment”, in ancient times the Sun was seen as abandoning the Earth.

Show the students a video/DVD about eclipses to expose them to the workings of a Total Solar Eclipse and introduce language associated with eclipses.

Highlight and clarify solar eclipses and introduce lunar eclipses. Particular attention to drawn to the shadowing of the Umbra and Penumbra and how these relate to total or partial eclipses. (see teachers’ note 6)

Students are given an Eclipse question handout sheet that is to be completed in class.

Talk about how often solar and lunar eclipses occur and that not many people ever see total solar eclipses because the path of totality is quite narrow and if you are not within that path you do not see a total eclipse.

Safety issues in that you should never look directly at the Sun as the rays can burn retina of the eye. Best to watch an eclipse on TV, Internet or make a pinhole projector details for this can be found on the web or in a library book.

Ancient people feared total solar eclipses and the Chinese thought that a dragon was eating up the Sun. Christopher Columbus used his astronomical knowledge of a future total lunar eclipse to scare local Jamaican natives into giving him and his crew food.

<table>
<thead>
<tr>
<th>Topic: Phases of the Moon</th>
<th>Required Materials:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives:</td>
<td>• Posters of the phases of the Moon</td>
</tr>
<tr>
<td>The overall goal for this</td>
<td>• Information Sheet 3 – Moon Phases</td>
</tr>
<tr>
<td>lesson is for students to</td>
<td>• Worksheet 4 – ‘Phases of the Moon’</td>
</tr>
<tr>
<td>1: understand how the positions of the Sun, Moon and Earth affect the phases of the Moon</td>
<td>• 25 blown up balloons</td>
</tr>
<tr>
<td>2: understand that Sunlight reflects off the surface of the Moon</td>
<td>• Students own science books</td>
</tr>
<tr>
<td>3: observe and draw the phases of the Moon on a chart</td>
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<tr>
<td>4: predict which phase of the Moon will be in the following week</td>
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<tr>
<td>New terms: revise meaning of rotate, phase and add illumination to the Moon word bank.</td>
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<tr>
<td>Recap on some Moon information the class already knows. Revise three things in</td>
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</table>
particular that are important for our lesson today, these things we learnt from the video we watched in the first Moon lesson, students will be asked to please listen carefully.

We learnt that the Moon is Earth’s own natural satellite and it has a special relationship with Earth in that it …. around it. Wait for students to answer with the correct word: Orbits. Ask who recalls the definition of orbit – show definition on OHT.

We also learnt that the Moon has no light of its own. What is the reason behind this? Await response, prompt if necessary. No object in the Solar system produces its own light apart from the Sun. All other objects shine due to reflected Sunlight. The Sun produces its own light because nuclear fusion reactions within the Sun produce huge amounts of energy. We learnt that the sky on the Moon is black rather than blue as on Earth. (Check this by looking at photos of lunar landings). Why is the sky black? There is no atmosphere on the Moon to break up the Sun’s rays into colours. (see teachers’ note 7)

We found out a lunar month is how long it takes for the Moon to make one full orbit around the Earth. Ask how many days make up a synodic Lunar Month? After students have responded tell them there are exactly 29.53 days in a synodic lunar month.

To move on, it must be noted that during a synodic Lunar Month the Moon goes through all of its phases.

To understand the phases of the Moon lets recap what phase means. Ask who can give the class a definition of what a phase is? Wait for a response then show OHT definition and have a class member read aloud the definition.

By looking closely do you see another word that may need defining to help us understand the Phases of the Moon?

What does Illumination mean? Wait for a response. Show OHT.

Can anyone explain how illuminate ties in with the Phases of the Moon? The Sun. Yes that is right, because just like the Earth one half of the Moon is lit by the Sun whilst the other half is in darkness, so we know that the Moon experiences days and nights also.

Draw a rough diagram of this on the board.

If anyone has any questions so far?

We need to ask how the Sun affects what we see, wait for a response. The phases we see result from the angle the Moon makes with the Sun as viewed from Earth.

| Website that shows pictures of the phases of the Moon. | Overhead Projector |
| Definitions of the following words on OHT – orbit, phase, illumination, |
In other words we only see the Moon because Sunlight reflects back to us from the Moon’s surface. If you can imagine looking down upon the Sun, Earth and Moon you would see that the half of the Moon facing the Sun is always lit, but the lit side does not always face the Earth.

As the Moon circles the Earth, the amount of the lit side we see changes and these changes are known as – open it out to the class to say the Phases of the Moon.

Ask how many phases of the Moon are there? The answer will probably be 4, this is right because only four are mentioned in a lot of Moon books but there are actually more, who knows the answer? Eight.

Give out worksheet with phases and name each one.

Now we need to bring all of this new information together so let’s put the theory into practice and have a little hands on demonstration.

A balloon will be given to each student and then we will adjourn into middle room, which has been darkened, and OHT light will be turned on.

Everyone will be instructed to stand, they are the Earth and the balloon is the Moon, which they will hold in front of them with arms slightly bent and raised to head height. The Sun is behind them. Now rotate in an anti-clockwise direction and observe the change in the amount of Sunlight they see on the Moon – ask which phase out they are with ¼ turns.

Collect balloons and return to desks.

Students will be given the phases of the Moon chart and asked to fill in the correct phases from the word list below. Whilst students are doing this circulate and assist where necessary.

If time permits break class into groups of 8 and disperse them to the three computer terminals to log onto a website that shows pictures of phases of the Moon. So students can see visual representation of the Phases of the Moon to consolidate information set out in today’s lesson.

To close the lesson

We have learnt that there are how many Moon phases? 8 and that the Moon is illuminated by the …

What we see as phases is actually Sunlight reflecting off the surface of the Moon. After each new Moon the Moon is in the waxing phase, meaning that we are seeing more
and more of it each night and after the full Moon it becomes a waning Moon because we are seeing less and less of it each night. The Moon rises approximately one hour later each day and this is due to the rotation of the Moon about the Earth.

From what we have learnt today and knowing that a full Moon is due to this coming weekend, which phase will follow after that?

To link to the next lesson

We have studied the Moon over the few weeks and next week we are going to go up a gear and make plans to visit the Moon. We will be organizing ourselves into groups with each person taking on a different role within the team.

During the next week think about how you would get to the Moon, what you might take and what you would do once you arrived.

<table>
<thead>
<tr>
<th>Topic: <strong>Preparation to go to the Moon</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Objectives:</strong></td>
</tr>
<tr>
<td>The overall goal for this lesson is for students to understand what type of preparation astronauts might go through before a space flight to the Moon. This will be explored by:</td>
</tr>
<tr>
<td>1: understanding the different environments on the Earth and the Moon and in the space between them.</td>
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<tr>
<td>2: brainstorming what is required to be taken on a trip to the Moon</td>
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<tr>
<td>3: select who is on a flight team – 6 most important roles</td>
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<tr>
<td>4: design an emblem to go on the side of the spacecraft that is representative of Earth and humans</td>
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<tr>
<td><strong>Procedures:</strong></td>
</tr>
<tr>
<td>Lead in question – What do we do before we travel somewhere? “Remember last week I mentioned we were going to go to the Moon? Well before we can go we have to prepare for the trip.” What do you think some of the things we might need to know will be – open questions? Look for answers pertaining to environment, weather, food, selection of who is onboard and transport. Write responses on the blackboard.</td>
</tr>
<tr>
<td>Break up into pairs and each examines a different area. For the purposes of today’s activity the class forms into pairs and reads through the</td>
</tr>
<tr>
<td>• 12 sheets of multicolored cardboard (one for each pair)</td>
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<tr>
<td>• Information Sheet 4 – ‘Moon’</td>
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<tr>
<td>• Information Sheet 5 – ‘Earth’</td>
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<tr>
<td>• Information Sheet 6 – ‘Rockets’</td>
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<tr>
<td>• Information Sheet 7 – ‘Packing for the Trip – Space Food’</td>
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<tr>
<td>• Student Booklet 1 – ‘What should we take to the Moon?’</td>
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<tr>
<td>• Science journals</td>
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</tbody>
</table>
handouts, design an emblem and transfer information collated onto  cardboard sheet to be presented to class at end of lesson.

Each pair will investigate the following topics:

1: what are the different atmospheric conditions on the Earth and Moon we need to know about and the conditions in space?

2: brainstorm who will be on the flight team and what important abilities will they bring along

3: what do you need to pack for our trip and stay on the Moon

4: design an emblem representative of our world to go on the side of the spacecraft.

Provide the information sheets to assist with brainstorming activities.

Topic: Crashed on the Moon

Objectives:
The overall goal for this lesson is for students to

1: make a balloon rocket for each team

2: take part in a simulated flight to the Moon-using rocket balloon

3: a group decides which equipment/food is required when crash-landed on the lunar surface

Procedures:

Inform students that they are going to make a balloon rocket to blast off but before they do this they are to draw their emblem on a paper bag representing their flight team.

Please form pairs from last week. Paper bags will be distributed to pairs.

After this has been done each pair is given a long piece of string, a paper bag, an oblong balloon and a paper clip along with instructions on how to make a balloon rocket.

The class is given 20 minutes, to set themselves up and draw their emblem on the paper bag.

When all is ready to blast off run the countdown verbally to the class.

The teams are told that they are about to crash land on the Moon

Inform students that they must think carefully about what they have learnt regarding the different environments on the Earth and Moon, as this knowledge will assist them to survive.

Following the crash, an announcement will be made that the spaceship is disabled,
the radio is broken, and the nearest base is 50km away.

Each group must get to the base with no outside help. Advise that their task is to decide which emergency supplies from their disabled spaceship to take with them. They are to list the supplies in order of priority and state why they chose each item. Lead the discussion from the front of the classroom as to what was thought the vital piece of equipment to take and so on down the list. The responses will be written on the blackboard along with an answer as to why it was chosen as a necessary item.

Find the dictionary meanings of the Moon related words on the word wall. Introduce any more new scientific terminology.

Introduce the ‘Edible Lunar Vehicle project’. Form teams and begin task. (This project will take weeks to complete!)

Topic: Revision on the Moon

Objectives:
The goal for this lesson is for students to revise information learnt over the past weeks.

General Background Information

Who used the Latin word ‘Maria’ to describe the vast lakes of hardened lava on the lunar surface and why did he name them so?

How far is the Moon from the Earth and how many days would it take to fly there? (384,000kms and 3 days traveling)

What is believed to have caused the craters on the far side of the Moon? (Meteorites, thousands of years ago)

Why would the astronauts’ footprints still be visible on the lunar surface today? (Yes because no wind to erase them)

Gravity

• Word bank
• Student Booklet 2 – ‘Edible Lunar Vehicle Project’
• Food stuff
• Computer access
• Science journals
What is gravity?
What percentage of Earth’s gravity does the Moon have? 16%
If you were standing on the surface of the Moon and dropped a feather and a hammer at exactly the same time, which one would hit the ground first? (Land at same time because there is no air resistance due to a lack of lunar atmosphere)

Tides
Fill in details on a simple tidal model as well as neap and spring tidal models.
What force is in action? (Gravity)
Which phases of the Moon were found to have the greatest influence upon the tides and why? (New and full as Moon’s gravitational force aligns with Suns)

| APPLICATION | • Design, make and test the team’s edible Moon vehicle. Present the final model. Discuss and infer from test results.  
• Students re-record their ideas in a journal and compare their understandings at the end of the unit to those at the beginning. Ask these questions:  
  ▪ Where is the Moon and what do you know about it?  
  ▪ What can you see of the Moon from your place in the world?  
  ▪ What patterns can you observe?  
  ▪ How do people in other parts of the world see the Moon?  
• Student’s complete end of term review assessment test. | • Science journals  
• Edible Moon vehicles  
• Assessment Test 1 – ‘Moon Quiz’ |

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