



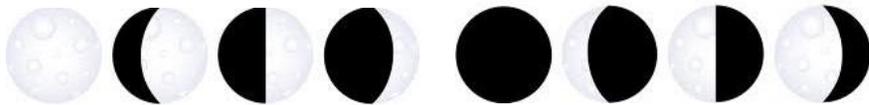
## ACTIVITY 1

### UNDERSTANDING WHAT YOU READ

Read the content for this topic then answer the following questions to see how much you understand about what you read.

1. What is another name for moon?
2. What shape is the moon's orbit?
3. The moon is at its biggest and brightest when it reaches the point \_\_\_\_\_ to Earth.
4. What is the Earth's diameter calculated using the moons?
5. The moon appears to be the same size as what?
6. What does the gravitational pull of the moon affect?
7. Which planet in our solar system has the most moons?
8. What percentage of the moon's surface is NOT visible from Earth?
9. True or False: The moon has no atmosphere
10. If you weighed 96 kg on earth what would you weigh on the moon?

### LABEL THE PHASES OF THE MOON



**Full Moon** \_\_\_\_\_



## ACTIVITY 2

### MOON WORDS

There are a number of sayings and phrases that contain the word moon. Match the phrases with its meaning and complete the sentences by inserting the correct phrase.

#### Saying

- ask for the moon
- to aim for the moon
- to know as much as the man in the moon
- to moon about
- be over the moon
- casting beyond the Moon
- many moons ago
- once in a blue moon
- promise the moon
- reach for the moon

#### Meaning

- a long time ago
- to be extremely pleased about something
- to be very ambitious.
- to know nothing
- to make wild speculations
- to promise something impossible
- to try to achieve something that is very difficult
- to wander listlessly, especially if in love
- to want something that is not possible
- very rarely

#### Sentences

Wanting a new computer is like \_\_\_\_\_.

Marie was \_\_\_\_\_ when she got the job.

It all happened \_\_\_\_\_ so I only have the faintest memory of that time.

My brother lives in Africa, so I only get to see him \_\_\_\_\_.

He \_\_\_\_\_ but five years later they were still living in the same small house.

If you want success, you have \_\_\_\_\_.



## ACTIVITY 3

### EARTH AND MOON

In this activity you will examine scale models of Earth and its Moon.

The diameter of the Moon is \_\_\_\_\_ km

The diameter of Earth is \_\_\_\_\_ km

What percentage of Earth's diameter is the Moon's diameter? \_\_\_\_\_

Use the list below to work out:- If Earth were the size of a regular basketball, then the Moon would be the size of a \_\_\_\_\_

**diameter in cm**

<b>basketball</b>	<b>24</b>
<b>soccer ball</b>	<b>22</b>
<b>baseball</b>	<b>7.3</b>
<b>tennis ball</b>	<b>6.9</b>
<b>golf ball</b>	<b>4.3</b>
<b>marble</b>	<b>0.6</b>

Use a basketball as a model of Earth. Use a second ball, the one determined above, as a model of the Moon.

Determine the scale of your model system by setting the diameter of the basketball equal to the diameter of Earth.

\_\_\_\_\_ cm = \_\_\_\_\_ km therefore,

1 cm = \_\_\_\_\_ km

If the distance to the Moon from Earth is 382,500 km, then how far apart must you separate the two scale models to accurately depict the Earth/Moon system?

**The model separation in centimetres (x) is derived:**

**$x = \frac{\text{actual distance to the Moon in kilometres}}{\text{scale value in kilometres}}$**

The two scale models must be separated by \_\_\_\_\_ meters.

Set up your scale model of the Earth/Moon system. Does it fit in your classroom?



## ACTIVITY 4

### WORDS AT WORK

In Wordy News this week we defined the word WANED which was used in the following way:



The visible face of the moon wanes during the phases after full moon in which the lighted portion is gradually reduced to a thin crescent.

**Read the following poem and answer the questions.**

### The Half Moon

The half-moon shows a face of plaintive sweetness  
 Ready and poised to wax or wane;  
 A fire of pale desire in incompleteness,  
 Tending to pleasure or to pain:-  
 Lo, while we gaze she rolleth on in fleetness  
 To perfect loss or perfect gain.  
 Half bitterness we know, we know half sweetness;  
 This world is all on wax, on wane:  
 When shall completeness round time's incompleteness,  
 Fulfilling joy, fulfilling pain?-  
 Lo, while we ask, life rolleth on in fleetness  
 To finished loss or finished gain.

By Christina Rossetti

1. What is the opposite of wane in this text?
2. Do you think the poet refers to the waning moon as pleasure or pain?
3. Is a waning moon 'perfect loss or perfect gain'?
4. Which word in the text means:
  - to roll
  - rapidity of movement
5. What is a complete moon? What is an incomplete moon?



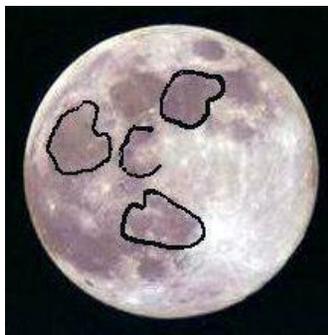
## ACTIVITY 5

### CHECK IT OUT

#### What do you see?

There are quite a few images that can be seen when looking at the full moon depending on the season, the viewer's location and the time of night.

What do you think the viewer sees in each of these photos?



What do you see?



## ACTIVITY 6

### NEWS IN THE SPOTLIGHT

#### Punctuated by the moon

In the story below all the punctuation marks have been omitted. Identify where full stops, commas, quotation marks, a percentage sign and apostrophes need to be inserted.

The super moon arrived when it peaked at about 4am on August 12 With the swell picking up along beaches surfers as well as astronomy buffs were welcoming the arrival of the enlarged moon According to stargazing expert Owen Bennedick the super moon looked 7 bigger in size than a usual moon He said the elliptical nature of the moons orbit meant the oversized image being seen was about 50000km closer to Earth than when at its furthest distance away The super moon happens about two to three times a year he said. This is the closest approach for this year The best viewing platform was anywhere low along the coastline with an unobstructed horizon. Its an optical effect when its closer to the horizon he said If there's any smoke or dust in the air it will create a blood-red moon too

