

WorksheetCloud.com - Question Sheet

Subject: Grade 8 NATURAL SCIENCES

Topic: Natural Sciences: Exam Term 4

Total Marks: 100

Question 1: True/False [2]

When a plastic ruler is rubbed with a cloth the electrons are rubbed off the cloth resulting in a positive charge on the plastic.

TRUE

FALSE

Questions 2 to 3 refer to the following graphic

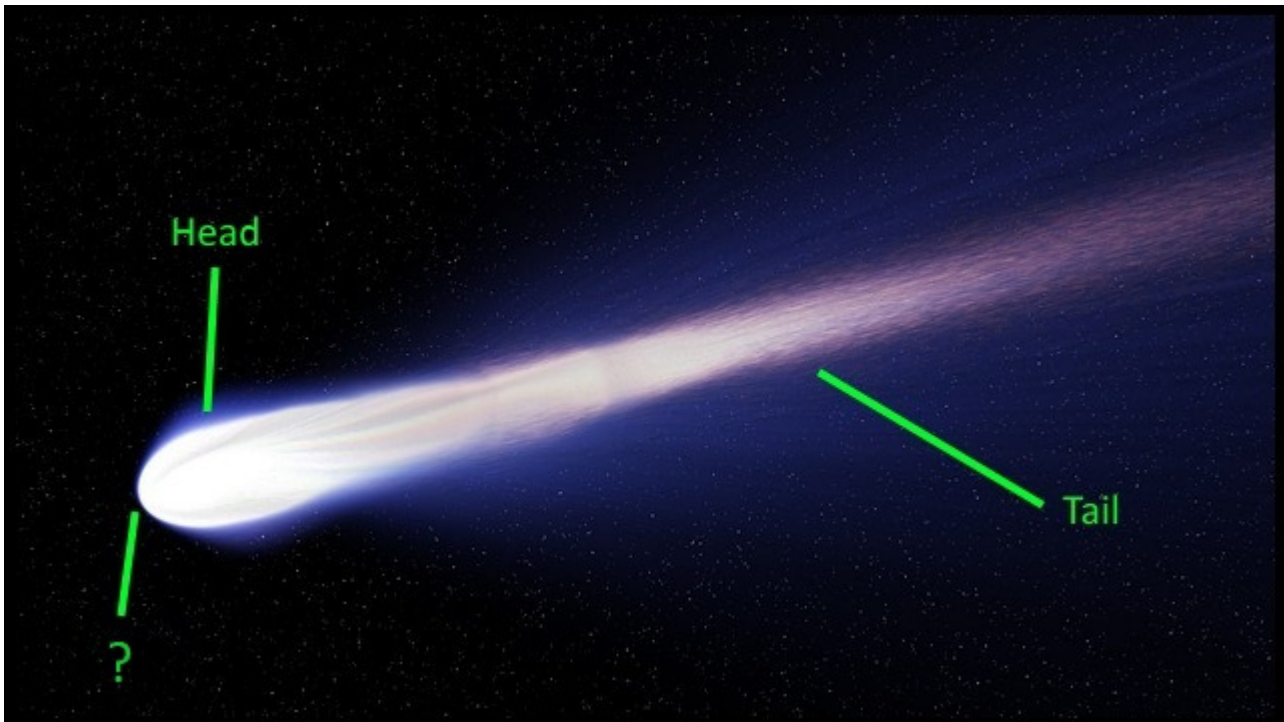


Figure 1: Comet Coma Missing

Question 2: True/False [2]

A comet is made from ice and rock.

TRUE

FALSE

Question 3: Write Your Answer [3]

Complete the sketch of a comet by adding the missing label.

Question 4: True/False [2]

Evaluate whether the following statement is true or false:

"At the centre of our galaxy you will find a black hole."

TRUE

FALSE

Question 5: True/False [2]

The LHC (Large Hadron Collider) is situated in Florida.

TRUE

FALSE

Question 6: True/False [2]

Evaluate whether the following statement is true or false:

"Light travels at exactly 300 000 000 m/s"

TRUE

FALSE

Question 7 refers to the following graphic

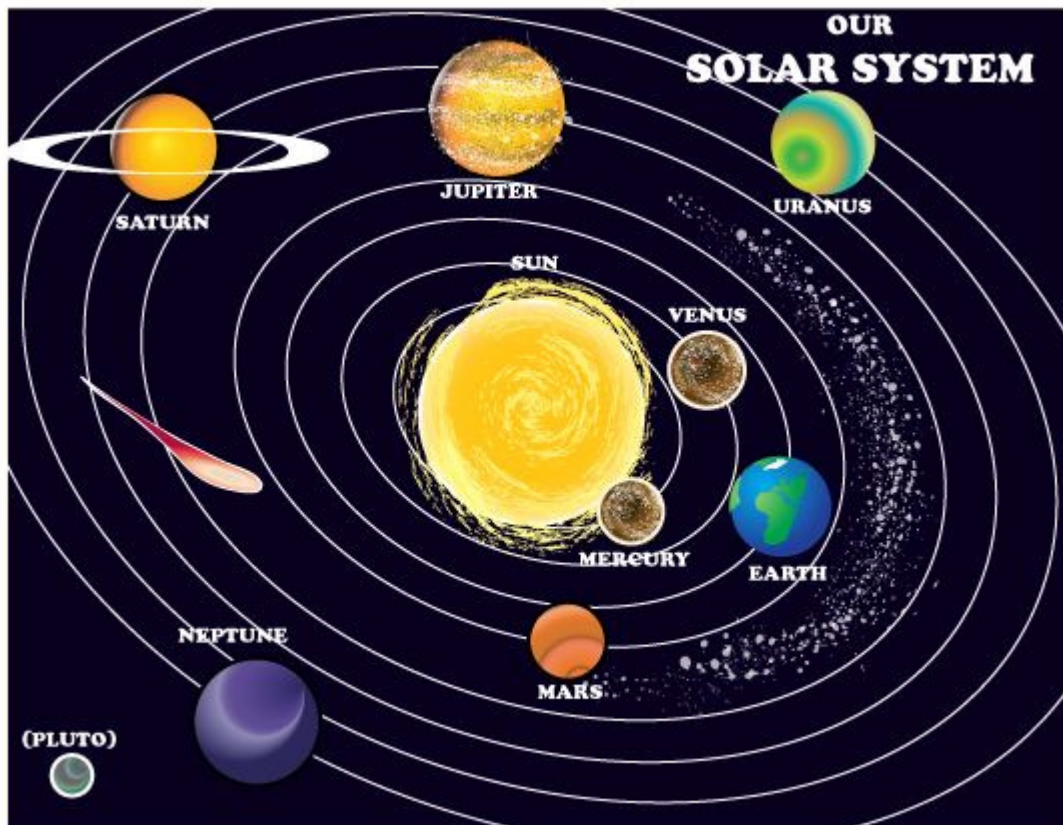


Figure 2: our solar system

Question 7: True/False [2]

Evaluate whether the following statement is true or false:

"The Earth is 27 000 light years from the Sun."

TRUE

FALSE

Question 8: True/False [2]

On a smooth surface, like a piece of white paper, all the light is reflected in the same direction.

TRUE

FALSE

Question 9: Multiple Choice [4]

When a negatively charged plastic ruler is rubbed against a neutral plastic ruler

- A** both rulers become neutral
 - B** electrons are transferred from the negatively charged ruler to the neutral ruler
 - C** there is no transfer of electrons
 - D** the neutral ruler loses charge
-

Question 10: Multiple Choice [4]

A neutrally charged ruler is rubbed by a neutrally charged substance A. Substance A is then held near a positively charged substance B. It is found that there is a force of attraction between substance A and substance B.

This means that

- A** electrons were transferred from the ruler to substance A
 - B** substance A became positively charged when rubbed against the ruler
 - C** electrons were transferred from substance A to the ruler
 - D** the ruler became negatively charged when rubbed by substance A.
-

Question 11: Multiple Choice [4]

Which of the following is the best example of a weak form of static electricity?

- A** the current produced by a single cell
 - B** the current produced by a three cell battery
 - C** a charged ruler
 - D** a bolt of lightning
-

Question 12: Multiple Choice [4]

During the nuclear reactions on the Sun, ... is formed as a byproduct.

- A** hydrogen
- B** sodium
- C** helium
- D** argon

Question 13: Multiple Choice [4]

The sun is considered to be a

- A** red dwarf
 - B** young star
 - C** gas giant
 - D** middle-aged star
-

Question 14: Multiple Choice [4]

From the list below, select the most suitable unit to measure the distance between planets.

- A** Miles
 - B** Kilometres
 - C** Light years
 - D** Light minutes
-

Question 15: Multiple Choice [4]

Which of the following units is **larger** than a light hour?

- A** Kilometre
 - B** Mile
 - C** Light year
 - D** a Solar cycle
-

Question 16: Write Your Answer [3]

The nucleus of an atom contains positively charged

Question 17 refers to the following graphic

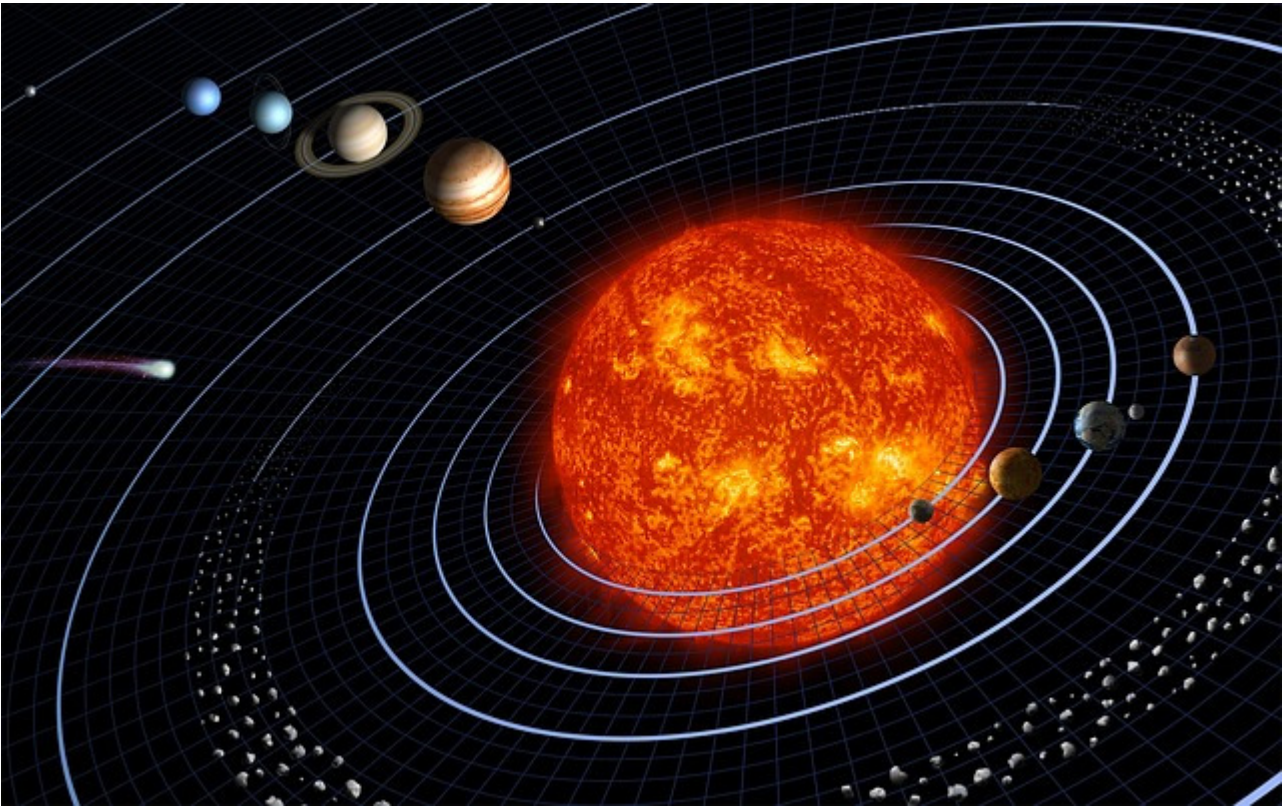


Figure 3: Solar system

Question 17: Write Your Answer [3]

Complete the solar system by adding the missing planet.

Mercury, ... , Earth, Mars, Jupiter, Saturn, Uranus, Neptune.

Question 18: Write Your Answer [3]

The Alpha Centauri system has three stars, Centauri A, Centauri B and

Question 19 refers to the following graphic

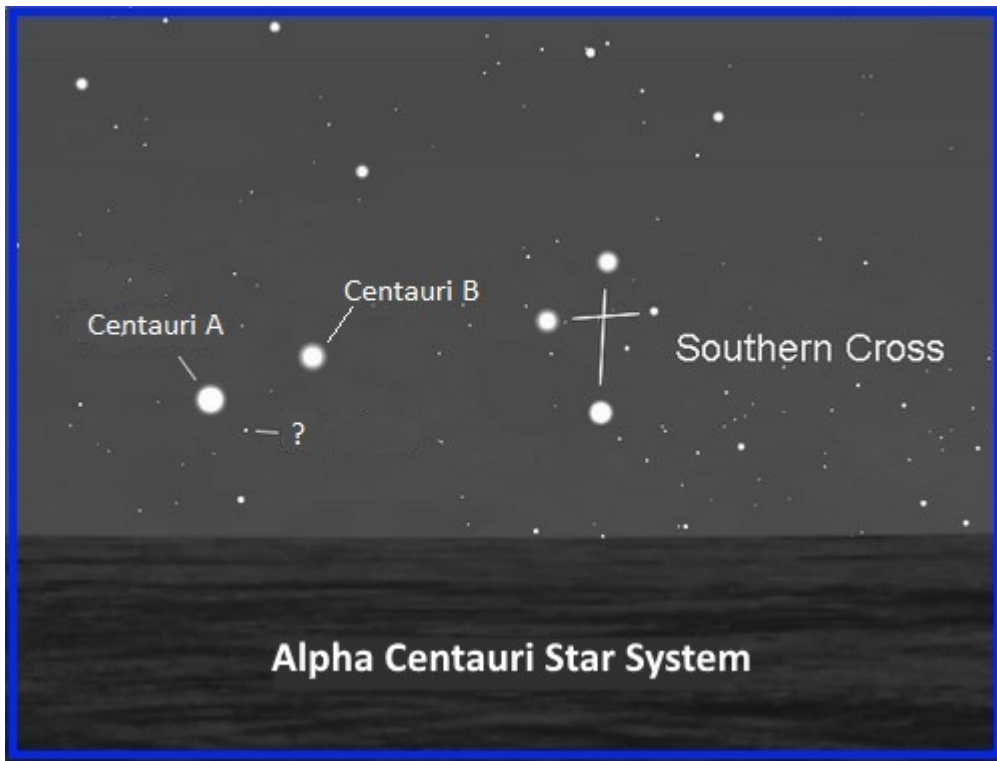


Figure 4: Proxima missing

Question 19: Write Your Answer [3]

Complete the sketch by adding the missing label:

The missing star is called

Question 20: Write Your Answer [3]

One million has ... zeros.

Question 21: Write Your Answer [3]

What component is used to open and close a circuit?

Question 22 refers to the following graphic

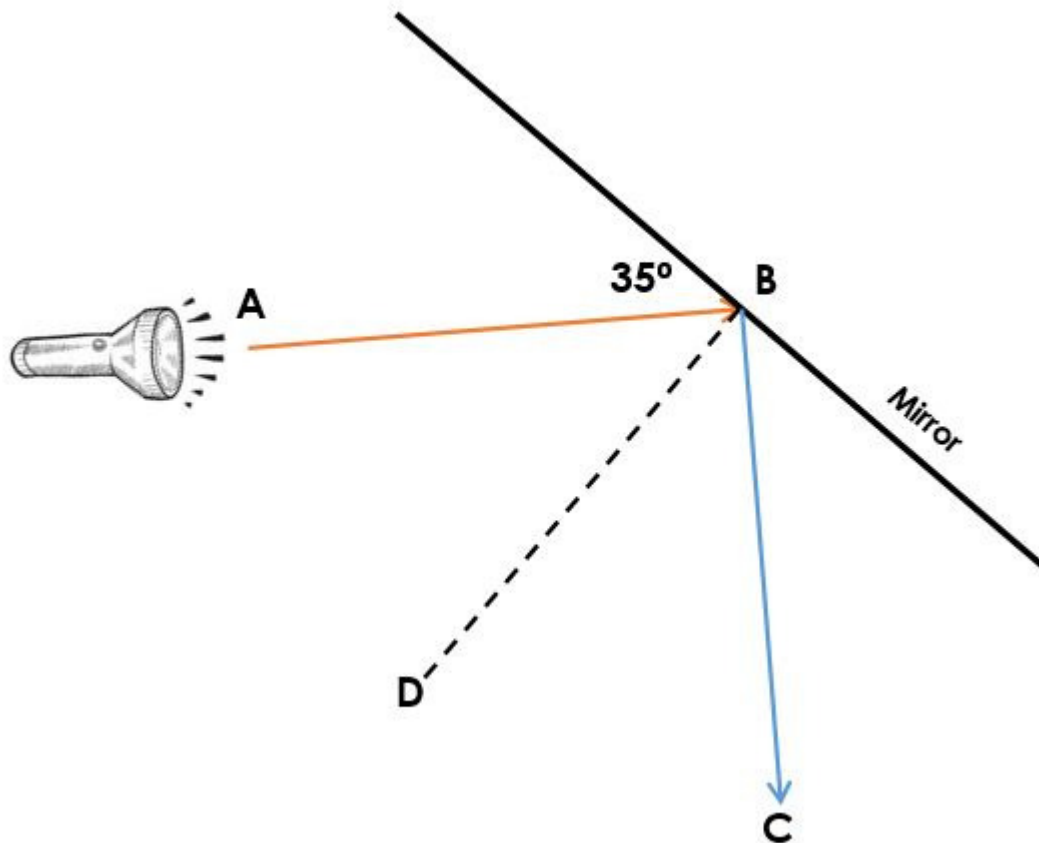


Figure 5: Torch and mirror

Question 22: Write Your Answer [3]

Study the diagram carefully.

What is the size of the angle that the normal makes with the plane?

Just type the number.

Question 23 refers to the following graphic



Figure 6: light bulb filament

Question 23: Write Your Answer [3]

The light energy from luminous objects is transferred by

Answer using one word only.

Question 24: Write Your Answer [3]

Name all the colours in the visible spectrum of visible light in order of increasing wavelength.

Separate each colour with a semi-colon (;).

Question 25: Fill In The Blanks [4]

A fire can be caused by static electricity. This is because a (1) can be produced which causes (2) .

1	
---	--

2	
---	--

▶ flame

▶ spark

▶ a rapid heating of the air

▶ a lot of smoke

Question 26: Fill In The Blanks [4]

The particles of an atom that do not move are the (1) and (2) .

List your answers in alphabetical order.

1	
---	--

2	
---	--

▶ molecules

▶ protons

▶ electrons

▶ neutrons

Question 27: Fill In The Blanks [4]

The Sun produces energy by using (1) reactions and produces (2) gas as a byproduct.

1	
---	--

2	
---	--

▶ fossil fuel

▶ nuclear

▶ helium

Question 28: Fill In The Blanks [8]

Create a list of planets from coldest to hottest:

Coldest

1. (1) .

2. (2) .

3. (3) .

4. (4) .

Hottest

1	
---	--

2	
---	--

3	
---	--

4	
---	--

▶ Saturn

▶ Venus

▶ Jupiter

▶ Mercury

Question 29 refers to the following graphic



Figure 7: Merging galaxies PG

Question 29: Fill In The Blanks [4]

Look at the sketch and answer the following question:

In this sketch two (1) galaxies are busy (2) . This means that they will someday become one.

1		2	
----------	--	----------	--

▶ spiral

▶ bar

▶ nebula

▶ diverging

▶ merging

▶ separating

Question 30 refers to the following graphic

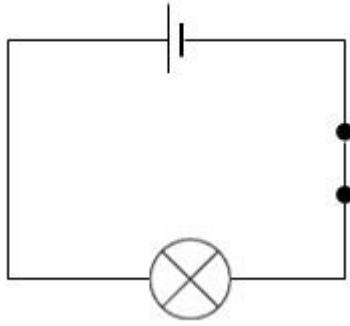


Figure 8: Electrons

Question 30: Fill In The Blanks [4]

Electrons in a circuit flow from the (1) when the (2) .

1	
----------	--

2	
----------	--

▶ positive terminal to the negative terminal

▶ negative terminal to the positive terminal

▶ switch is closed

▶ the light burns brighter

30 Questions, 11 Pages