

Lesson 7: Describing objects

I. Shapes and measurements

1. Draw the following:

- A point
- A straight line
- A curved line
- An angle – acute, obtuse, right
- Parallel lines
- A vertical line
- A horizontal line
- A diagonal line

2. Read this and answer the questions:

The letter E has one vertical line and three horizontal lines. It also has four angles. Which of these letters are described below?

D, M, C, H, F, L, Z, B.

- a) A letter with 2 horizontal lines and 1 vertical line.
- b) A letter with 1 curved line and no straight lines.
- c) A letter with 2 curved lines and 1 vertical line.
- d) A letter with 2 parallel vertical lines, 1 horizontal line and 4 angles.
- e) A letter with 2 vertical lines and 2 diagonal lines.

3. Draw these figures and answer the questions below:

a circle – a square – a rectangle – a triangle – a semi-circle

- a) Which figure is curved?
- b) Which figures have parallel sides?
- c) Which figure always has equal sides?
- d) Which figure may have equal sides?
- e) Which figure has 3 angles?
- f) Which figure has a curved side and a straight side?

4. Now make sentences from the table – you may add other objects for description.

A coin		square		rectangular	
A ruler	is	rectangle.		circular	
A set square	shaped	semi-circle.		square	in shape.
A protractor	like a	triangle.	It is	semi-circular	
A chess-board		circle.		triangular	

5. Are the statements below true or false?

- a) A cube has 6 surfaces. They are all flat and square.
- b) The sides of a cone are tapering.
- c) The cross-section of a cylinder is rectangular.
- d) The longitudinal section of a cylinder is circular.
- e) The longitudinal section of a hemisphere is semi-circular.
- f) The cross-section of a cone is circular.

6. Complete the sentences:

- a) A ball is shaped like a sphere, it is
- b) A test-tube is shaped like a cylinder, it is
- c) A funnel is shaped like a cone, it is
- d) A salt crystal is shaped like a cube, it is

7. Other objects are used to describe shapes:

An egg – a star – a wedge – a disc – a bell – a kidney

Match the objects similar to them:

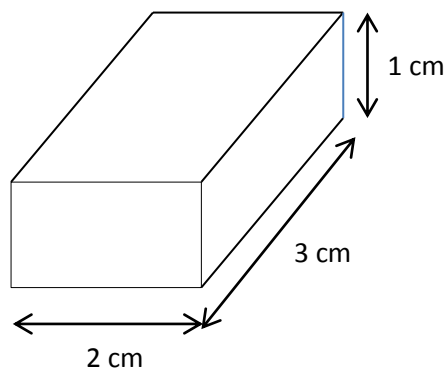
A snowflake – a blood-cell – a bean – a tulip – a potato – a piece of cheese

8. Read the description, draw the object and say what it is:

This object consists of a beam (a horizontal bar), a vertical support under the middle of the beam and two hemispherical pans, which are attached to the ends of the beams by diagonal bars. At the top of the support, under the beam, there is a triangular fulcrum. The support is fixed to a flat base. In front of the support there is a pointer. The top of the pointer is attached to the beam. The tip is in front of a scale. When the two pans are in line the pointer is vertical and the tip of the pointer is in the middle of the scale.

9. Study the diagram and complete the sentences with these words:

Volume – area – surface area – height – diameter – circumference – radius – cross-sectional area - width



- 1. This brick has a _____ of 3 cm.
- 2. It has a _____ of 1 cm.
- 3. It has a _____ of 2 cm.
- 4. It has a _____ of 2 cm².
- 5. It has a _____ of 22 cm².
- 6. It has a _____ of 6 cm³.

II. Reading

Read the text, complete the blanks and then decide which of these titles is most suitable and why:

The Earth's crust

The contents of the Earth

The properties of the Earth

The structure of the Earth

The Earth is a solid sphere. It is made up of three concentric spheres or l.....
These are called the core, the mantle, and the crust. The solid sphere is surrounded by a gaseous sphere, which is called the a.....

We know most about the crust of the Earth, which is the o..... sphere. It is very thin compared with the d..... of the whole Earth. It is only about 10km thick under the ocean and about 30km thick on land. It consists of rock which contains a lot of minerals. These are usually in compounds called oxides, containing oxygen, or sulphides, containing sulphur.

The mantle is much thicker than the crust. It is about 300km thick. It consists mainly of rocks, but we do not know much about their c.....

The core, which is situated inside the mantle, seems to be divided into two parts. The inner core is about 2800km in d..... We believe that it is mainly composed of iron, but it also c..... about 1% nickel. The layer surrounding the inner core is called the outer core and is approximately 2000km thick. It is probably composed of molten iron and nickel. However, the metals in the inner core seem to be r....., and therefore solid. This is because they are under very high pressure, which causes solidification in spite of the high t..... at the centre of the Earth.

Read these notes. Then make similar notes about the other parts of the Earth.

Name: inner core

Location: at the centre of the Earth

Measurement: diameter approx.. 2800 km

Composition: solid iron and nickel

(adapted from Bates, M.; Dudley-Evans, T. *Nucleus English for Science and Technology*. Longman 1990)

III. Grammar: Are you the English tense master?

Read the sentences in various tenses about a computer game "Asteroids".

Present

- Your spaceship has 5 lives left (Present Simple)
- You're playing a game called "Asteroids" (Present Continuous)
- You've been playing this game for 50 seconds (Present Perfect Continuous)
- You've destroyed 4 asteroids (Present Perfect)

Past

- I made this game about 3 days ago (Past Simple)
- I had been thinking about creating this game for several weeks (Past Perfect Continuous)
- Before I started making this game, I had refreshed my knowledge about trigonometry (Past Perfect)
- At this time yesterday, I was working hard to finish "Asteroids" (Past Continuous)

Future

- You will probably stop playing this game because it's a bit boring (Future Simple)
- By the end of April, I will have added more games of this type (Future Perfect)
- Will you still be playing this game in 10 minutes? (Future Continuous)
- I will have been trying to come up with a good Future Perfect Continuous sentence for an hour soon (Future Perfect Continuous)

(www.englishtenses.com)

Now write similar sentences about

- a) writing an essay**
- b) doing an experiment**
- c) studying at university**
- d) ?**