SHAPE, SIZE AND POSITION (PART 2)

I. Work in pairs. Study the two photographs and the site plan below, and identify the two buildings on the site plan.

Building 1: Is it A, B or G?
Building 2: Is it C, F or H?

II. Find these buildings on the site plan, and match them with letters A-H.

1. a rectangular building, close to a roughly rectangular lake
2. an oval building, pointed at both ends
3. a slightly curved building which looks like a set of teeth
4. a rectangular swimming pool enclosed in an oval or elliptical building
5. a structure semi-circular at one end and straight at the other end
6. a long, curved building adjacent to (next to) a small curved lake which is tapered at one end
7. a very long narrow rectangular building on the opposite side of the small lake from the long curved building
8. a doughnut-shaped (or ring-shaped) building

*III. Listen and write the letters A-H from the site plan next to the names of these buildings.*

1. Administration Building	5 Student Hostels
2. Research Centre	6 Campus Ship
3. Services Building	7 Workshop
4. Academic Block	8 Swimming Pool

1

IV. Match these sketches with the photos in I.


(a) plan / elevation
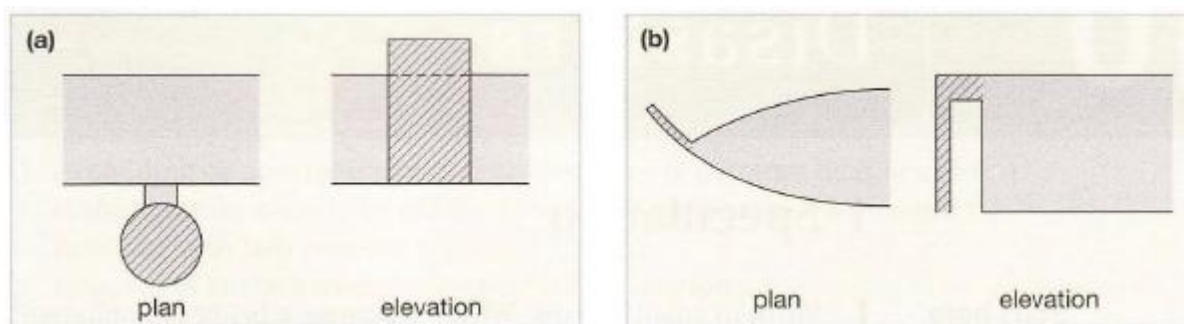
(b) plan / elevation

V. Complete the text using the words/phrases below. Use the illustrations to help you.

hatched - tapered - elevation - perpendicular - horizontal - solid - plan - broken – arch

hatched area | tapered end | perpendicular to the horizontal / horizontal | solid line | broken line | arch
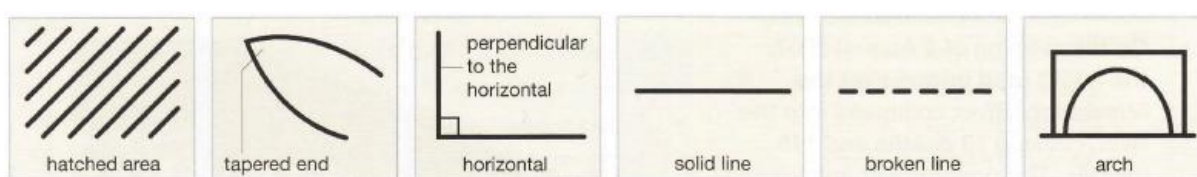
If you look at the photo and sketches of the Administrative Building, you can see an interesting architectural feature on the (1) _____ end of the building. The hatched area on the plan and the elevation represents a square (2) _____ which consists of a simple (3) _____beam which is (4) _____ to a vertical column. Turning now to the photo and sketches of the Student Hostel, the most interesting feature is the cylindrical staircase. This is shown as a (5) _____ circular shape on the (6) _____, and a rectangular shape on the (7) _____. Here, the (8) _____line shows the staircase structure, and the (9) _____line indicates the roof of the building behind the staircase.

VI. Work in pairs. Describe buildings so that your partner can locate them. Listen to your partner's descriptions and locate the buildings.
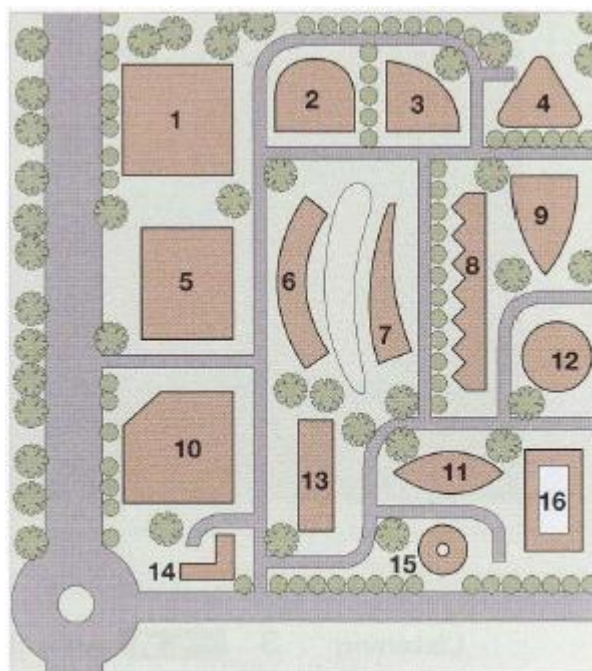
SIZE AND SHAPE

Study the description below:

> 1. A is a solid wooden block **40 cm high, 20 long and 10 cm wide.**
>
> 2. A is a solid wooden block **of height 40 cm, length 20 cm and width 10 cm**.
>
> 3. A is a solid wooden block. **It is 40 cm in height, 20 cm in length and 10 cm in width**.
>
> 4. A is a solid wooden block which **has a height of 40 cm, a length of 20 cm and a width of 10 cm**.
>
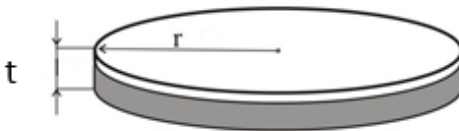> 5. **The height of A is 40 cm, the length is 20 cm and the width is 10 cm.**

40 cm

20 cm   10 cm
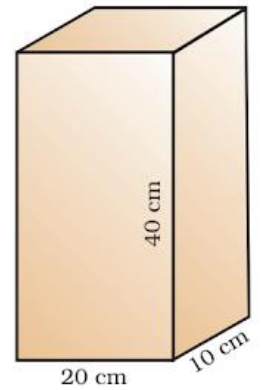
VII.. Now make similar statements about the following objects:
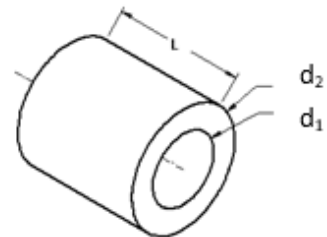
A
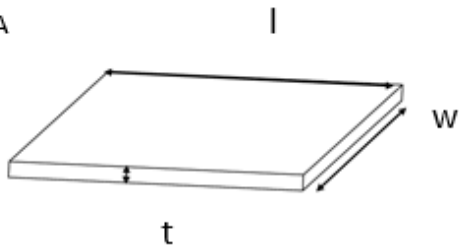
t (thickness) = 0.03 m
w (width)   = 1.0 m
l (length)   = 5.0 m
(steel)

C

d_2
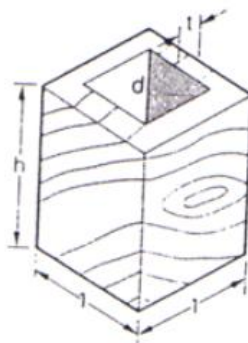d_1

B

r = 20 cm
t = 4 cm
(plastic)

L = 0.75 m   (copper)
d_1 (diameter) = 0.2 m
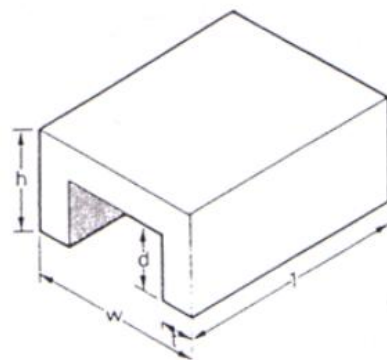d_1 (diameter) = 0.4 m

D

h = 10 cm
l = 8 cm
t = 1 cm
d = 9 cm
(wood)

l = 0.72 m
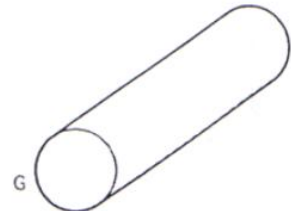h = 0.20 m
d = 0.28 m
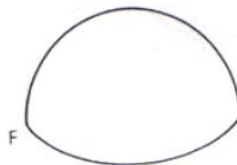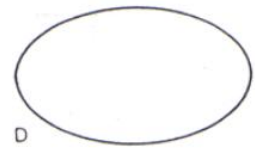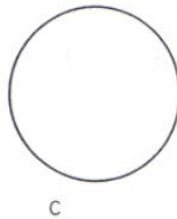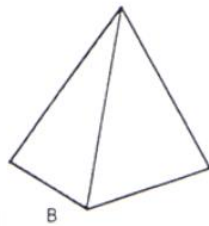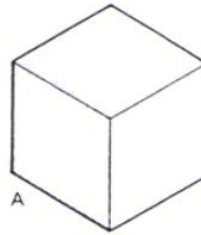t = 0.04 m
w = 0.32 m
(aluminium)

E

VIII. Here are some important 3-dimensional objects (= <u>bodies/solids</u>). If the objects are made of the following materials, make statements about them as in this example:

A   metal

A is a metal cube.

A   steel
B   wood
C   rubber
D   copper (solid)
E   iron (hollow)
F   plastic (hollow)
G   glass (solid)

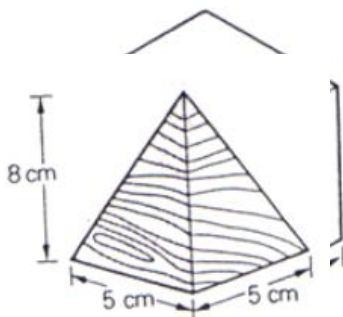*IX. Now describe these objects.*

Example: A is a solid steel cube of side 5 cm.
                                     having a side of 5 cm.
                                     which has a side of 5 cm.

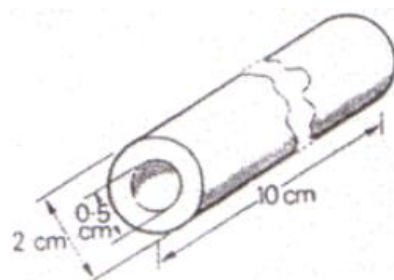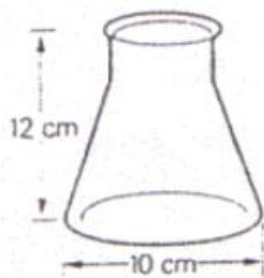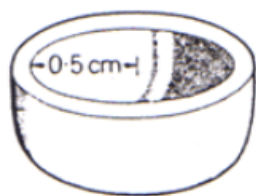A - cube: solid, steel   B - block: solid, wood   C - ball: hollow, rubber
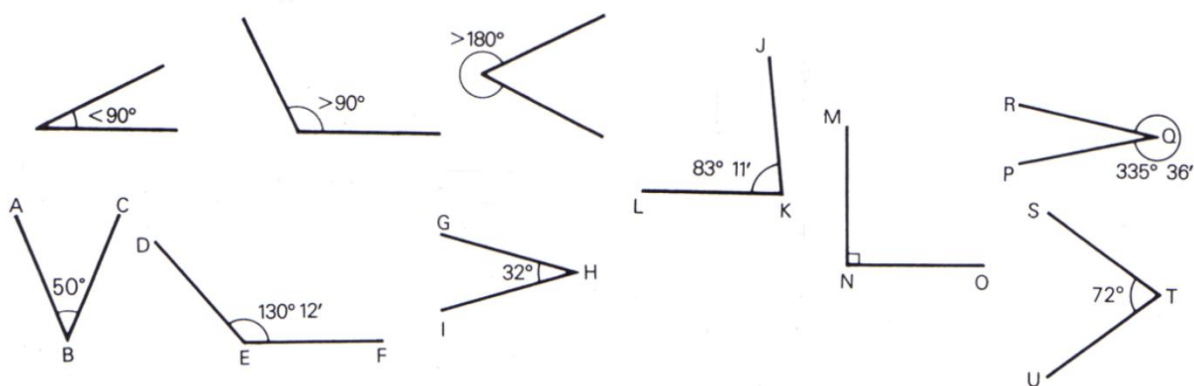

4

D – cup: hollow, silver   E – flask: empty, glass   F – tube: hollow, copper

X. Describe the angles. Use the following expressions:

acute angle, obtuse angle, reflex angle, right angle, full angle, flat angle, arm/leg of an angle, an angle of 90°, an angle of less than 90°, an angle greater than 90°; vertex (pl. vertices/vertexes)

The language of approximation

XI. Write sentences as indicated below.
Example: The length of AB = 9.03 cm (just over). – AB is just over 9 cm long.

1. x = 2.08 cm long	(a) exactly	(b) approximately	
2. y = 4.9 cm deep	(a) about	(b) just under	
3. The value of π = 3.14159	(a) approximately	(b) slightly over	
4. The width of the tube = 0.316 m	(a) under	(b) just over	(c) exactly
5. The speed of the plane = 622 kph	(a) a little over	(b) very approximately	

Physical features

XII. Fill in the missing items in the right-hand column to form meaningful sentences.
Example: **When we say** a 40-watt bulb, **we are talking** about wattage.

When we say	we are talking about
1. the road is 8 metres wide,	………………………………….
2. the device needs the mains electricity supply of 230 volts,	………………………………….
3. this structure is more than 2,000 years old,	………………………………….
4. this container holds 120 cubic metres of liquid when full,	………………………………….
5. the fence is 150 metres long,	………………………………….
6. Ben Nevis is 1,345 metres high,	………………………………….

7. the church tower is seventy seven metres tall,   ………………………………….

8. the country estate is eleven miles from Bath,   ………………………………….

9. The lecture hall can seat two hundred and fifty people,   ………………………………….

A/The ………………. OF + numeral + unit

XIII. Read the following sentences and fill in the following words + of, as appropriate: age, altitude, capacity, depth, height, length, price, speed, weight.

Example: The animal grew to **a height of** over a metre and a half.

1. Is the …………………………. of 1,700 pounds for an office laptop reasonable?

2. The motorcycle was running at a …………………………. over 220 kph.

3. The hot-water tank has a …………………………. 180 litres.

4. British children leave school at the ………………………… sixteen.

5. Loch Ness reaches a …………………………. 230 metres in the middle.

6. The settlement lies at an …………………………. about 2,700 metres.

7. An elephant can grow to a ………………… four metres and reach a …………………… of 5,000 kilos.

8. This kind of shark grows to a …………………………. four or five metres.

9. The mountain rises to a …………………………. over 6,000 metres

10. Isaac Newton died at …………………………. of eighty-five.