Physical Quantities – 2019 Nov

1. 0625/11/O/N/19/No.1

A student measures the volume of a small irregularly-shaped stone.

Which apparatus must be used?

A a measuring cylinder containing water and a ruler only

B a measuring cylinder containing water only

C an empty measuring cylinder and a ruler only

D a ruler only

2. 0625/12/O/N/19/No.1

A measuring cylinder contains 10 cm^3 of water.

A piece of steel is lowered into the measuring cylinder until it is fully submerged. The volume reading increases to 12 cm^3.

A second piece of steel is lowered into the measuring cylinder so that it is also fully submerged. The volume reading increases to 15 cm^3.

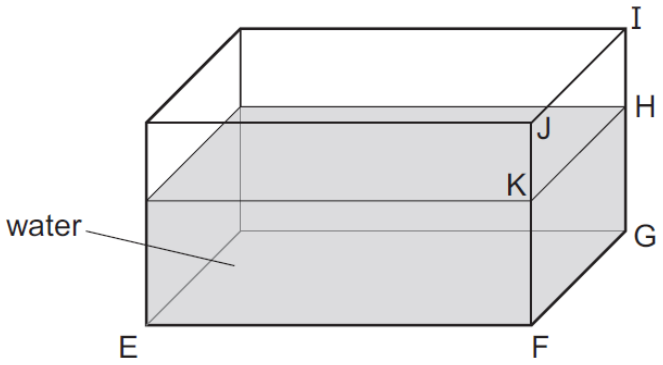
Which row shows the volumes of the two pieces of steel?

	volume of first piece of steel / cm^3	volume of second piece of steel / cm^3
A	2	3
B	2	5
C	12	3
D	12	15

3. 0625/13/O/N/19/No.1

A student uses a ruler to find the volume of water in a tank.

She measures the lengths EF and FG.



What other length does she need to measure?

A FJ **B** FK **C** HI **D** IJ

4. 0625/21/O/N/19/No.1

A student measures the diameter of a pencil.

Which measuring instrument will give the most precise reading?

A a measuring tape

B a metre rule

C a micrometer screw gauge

D a ruler

5. 0625/22/O/N/19/No.2

A student measures the dimensions of a cylindrical glass beaker.

For which measurement should she use a micrometer screw gauge?

A circumference of the beaker

B diameter of the beaker

C height of the beaker

D thickness of the glass wall of the beaker

6. 0625/23/O/N/19/No.1

Which is the best apparatus to use to measure the thickness of a coin?

A balance

B ruler with a millimetre scale

C micrometer screw gauge

D pressure gauge