Subject	Year	Month	
Mathematics	10	May	Balcarras From strength to strength

Topic:

3D forms and volume

3 lessons

Content (Intent)

Prior Learning

Year 10 Perimeter and area May
Year 9 Surface area of prisms January

Future Learning

Year 11 Circles, cylinders, cones & spheres December

Objectives

- Identify and name common solids: cube, cuboid, cylinder, prism, pyramid, sphere and cone;
- Sketch nets of cuboids and prisms;
- Recall and use the formula for the volume of a cuboid;
- Find the volume of a prism, including a triangular prism, cube and cuboid;
- Calculate volumes of right prisms and shapes made from cubes and cuboids;
- Estimate volumes etc by rounding measurements to 1 significant figure;
- Convert between metric volume measures;
- Convert between metric measures of volume and capacity e.g. 1ml = $1cm^3$.

Pedagogical notes (implementation)

Discuss the correct use of units.
Drawings should be done in pencil.
Consider 'how many small boxes fit in a larger box'-type questions.
Practical examples should be used to enable students to understand the difference between perimeter, area and volume.

How will understanding be assessed & recorded (Impact)

End of half term no
End of Year Year 11 mocks in November

How can parents help at home?

MathsWatch clips

Qualification KS3: G12abc, G21a, G25a

Qualification KS4: 43, 44, 112, 115, 119

Further reading/discussion

Reading / Enrichment	Literacy	Numeracy Links	Careers Links
http://passyworldofmathematics.com/big-measurements/			Designer Product designer Architects Builder Fashion designer