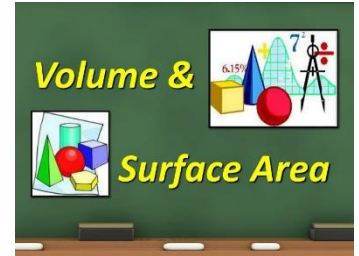


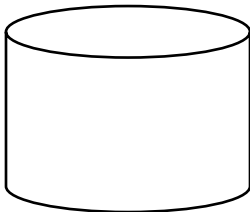


## Grade 9 - Mathematics Surface Area and Volume 6

### Activity



1.

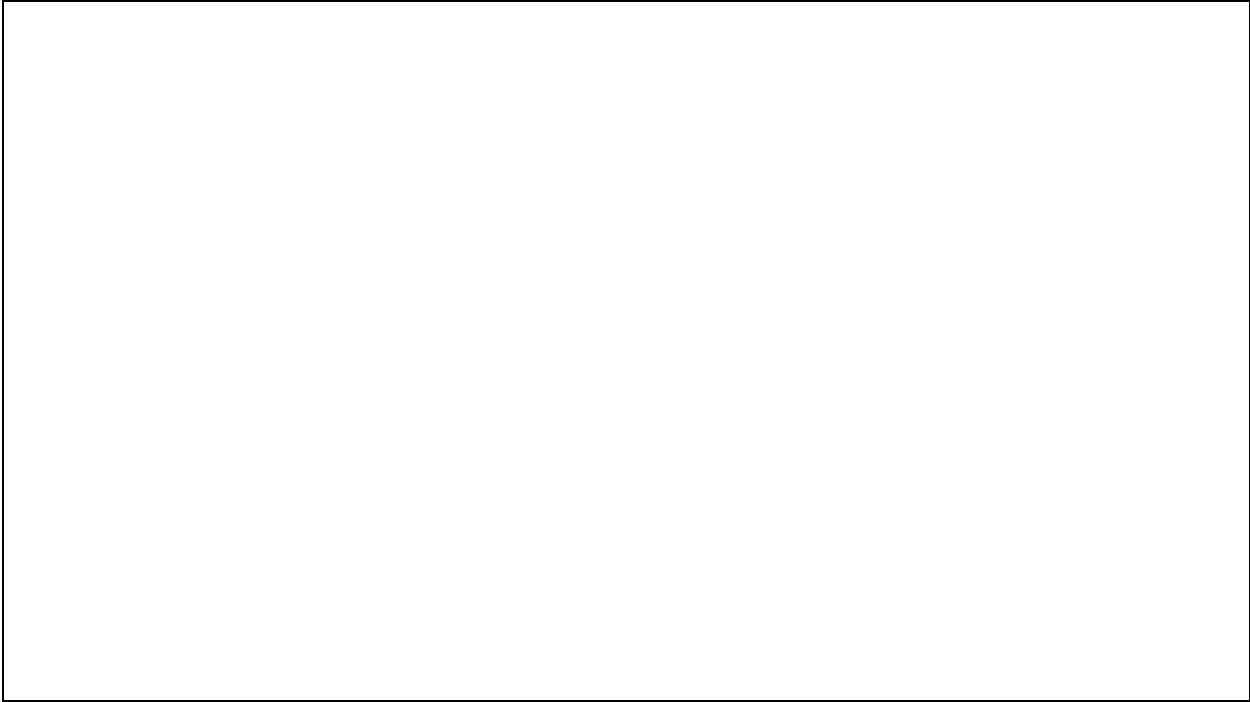


Radius = 10cm

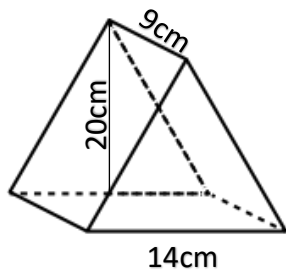
Height = 15cm

- Calculate the volume of the cylinder.
- Double the height and recalculate the volume.
- Double the radius and recalculate the volume.
- Show the change from (a) to (c) as a ratio.
- Double the both the radius and the height and recalculate the volume.
- Predict what the volume would be if you halved the radius.
- Work out the volume if you halved the radius to see if your prediction in (f) is correct.

Use the block below to show your working out:



2.

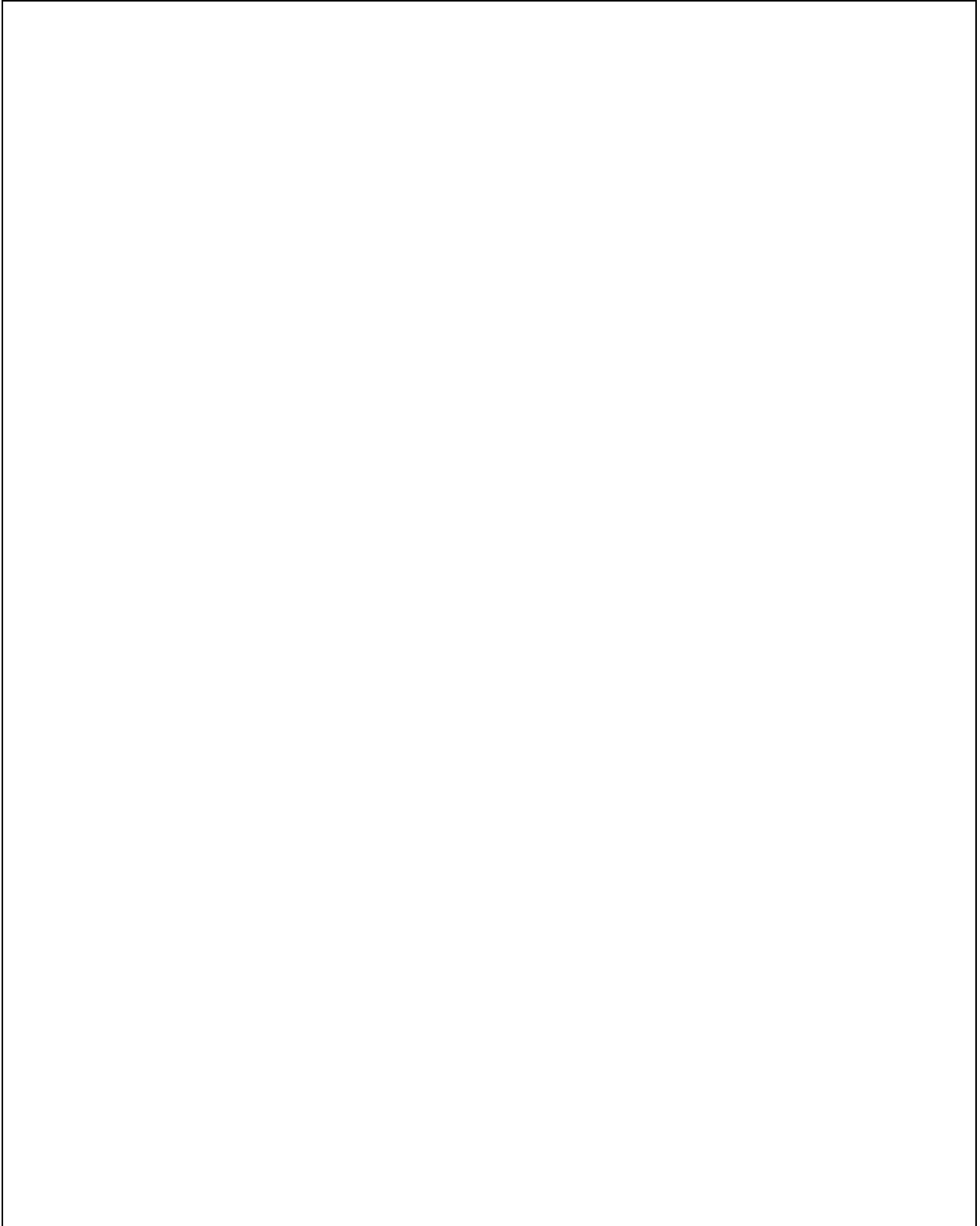


- Work out the volume of the triangular prism.
- Halve the Height and recalculate the volume.
- Halve the base and recalculate the volume.
- Predict what the volume would be if the perpendicular height was halved.
- Show the relationship between your answer to (a) and your answer to (b) in the form of a ratio.
- Predict what the volume would be if you doubled the base.
- Work out the volume if the base is doubled, to check your answer to (f)
- Double all the measurements and recalculate the volume.

Use the block on the next page, to show your working out:



# WorksheetCloud



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