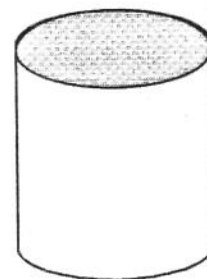


Instructions for Constructing your Birthday Cylinder



- Use your birthday month as the radius of your cylinder bases. For example, students with September birthdays will use a radius of 9 cm.
- Use the date of the month as the height of your cylinder. For example, a student with a birthday on September 30th will use a height of 30 cm.
- You must use centimeters as your measure so that all cylinders from the same month will have the same radius measure.
- Your name and birth date will be shown in large type on the top of the cylinder. For example, September 30th will be written as "9-30".
- You will calculate each of the following for your cylinder:
 - 1) the circumference of the base
 - 2) the lateral surface area
 - 3) the total surface area
 - 4) the volume
- On the lateral side of your cylinder, write the formulas and show your work (if your birthday is in January or February or in the first few days of any month, you may *talk to your teacher* about writing the information on paper instead of on the cylinder). Each solution will be a minimum of three steps.

For example, September 30th
Formula $A = \pi r^2$
Substitutions $A = \pi (9)^2$
Answer $A = 254.47 \text{ cm}^2$
- You may use any material available to you to create the cylinder. Poster board will work well.
- DUE DATE _____

Name: _____ Birthday: _____ Period: _____

Birthday Cylinder Grading Rubric

10 points	The radius and height are measured correctly.	_____
15 points	The circumference is calculated correctly and work is shown.	_____
15 points	The lateral surface area is calculated correctly and work is shown.	_____
15 points	The total surface area is calculated correctly and work is shown.	_____
15 points	The volume is calculated correctly and work is shown.	_____
10 points	The cylinder is clearly marked with name, birth date, and period.	_____
10 points	Neatness of the cylinder and all calculations.	_____
10 points	Creativity in constructing and decorating the cylinder.	_____

TOTAL

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