

Name \_\_\_\_\_

Date \_\_\_\_\_

1. I have a prism with the dimensions of 6 cm by 12 cm by 15 cm. Calculate the volume of the prism, and then give the dimensions of three different prisms that each have  $\frac{1}{3}$  of the volume.

	Length	Width	Height	Volume
Original Prism	6 cm	12 cm	15 cm	
Prism 1				
Prism 2				
Prism 3				

2. Sunni's bedroom has the dimensions of 11 ft by 10 ft by 10 ft. Her den has the same height but double the volume. Give two sets of the possible dimensions of the den and the volume of the den.

**Project Requirements**

1. Each project must include 5 to 7 rectangular prisms.
  2. All prisms must be labeled with a letter (beginning with A), dimensions, and volume.
  3. Prism D must be  $\frac{1}{2}$  the volume of another prism.
  4. Prism E must be  $\frac{1}{3}$  the volume of another prism.
  5. The total volume of all of the prisms must be 1,000 cubic centimeters or less.
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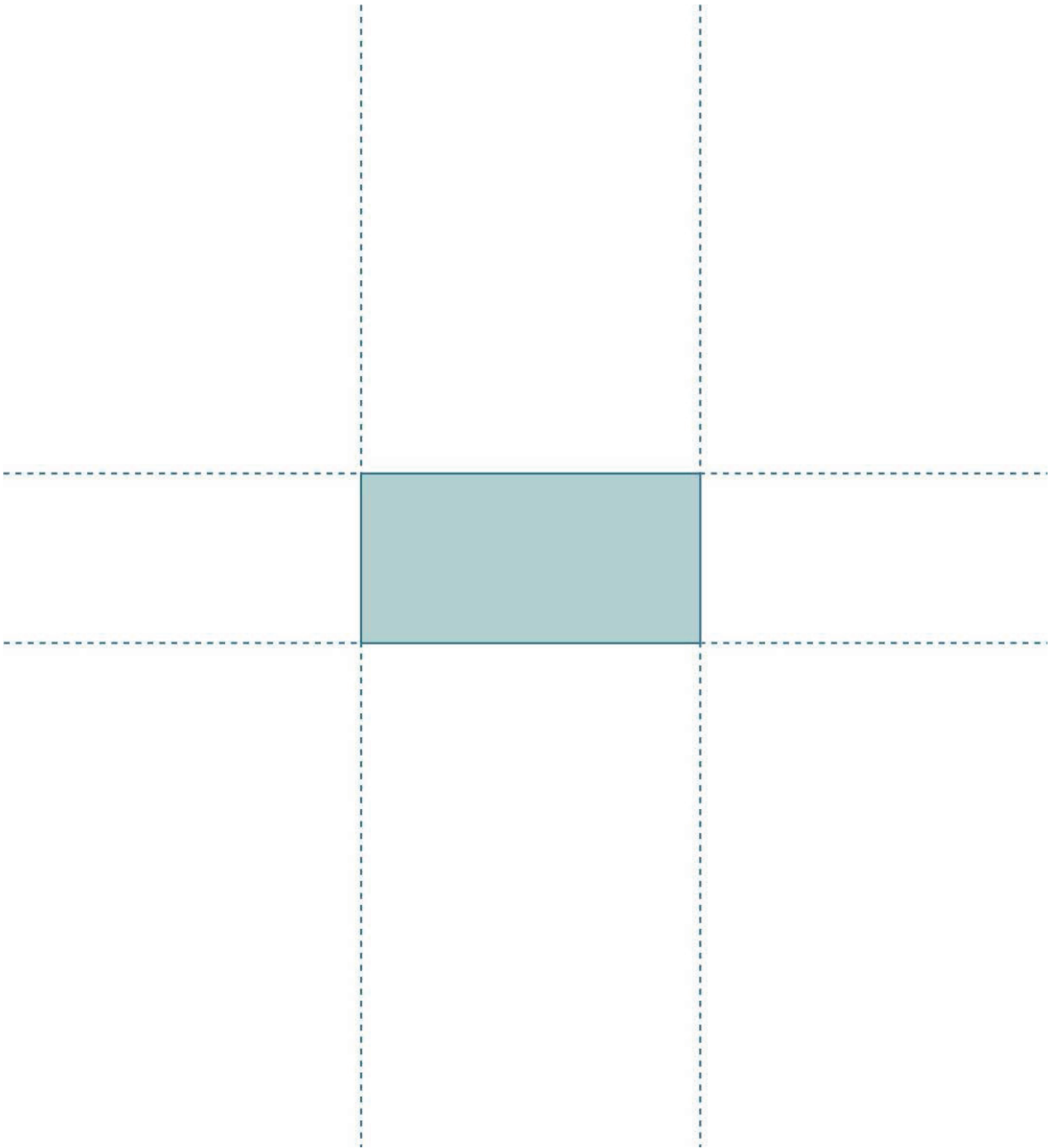
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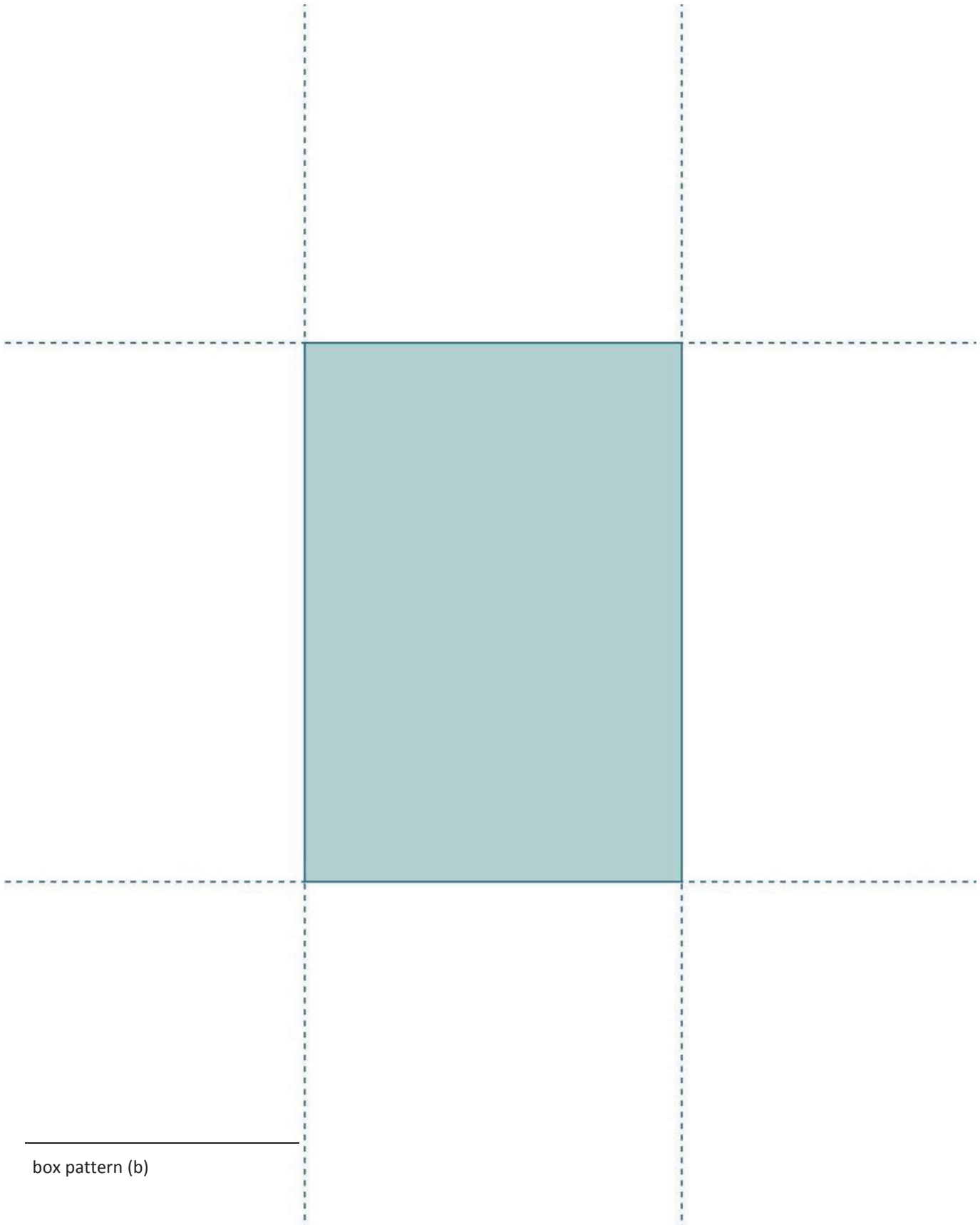
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project requirements

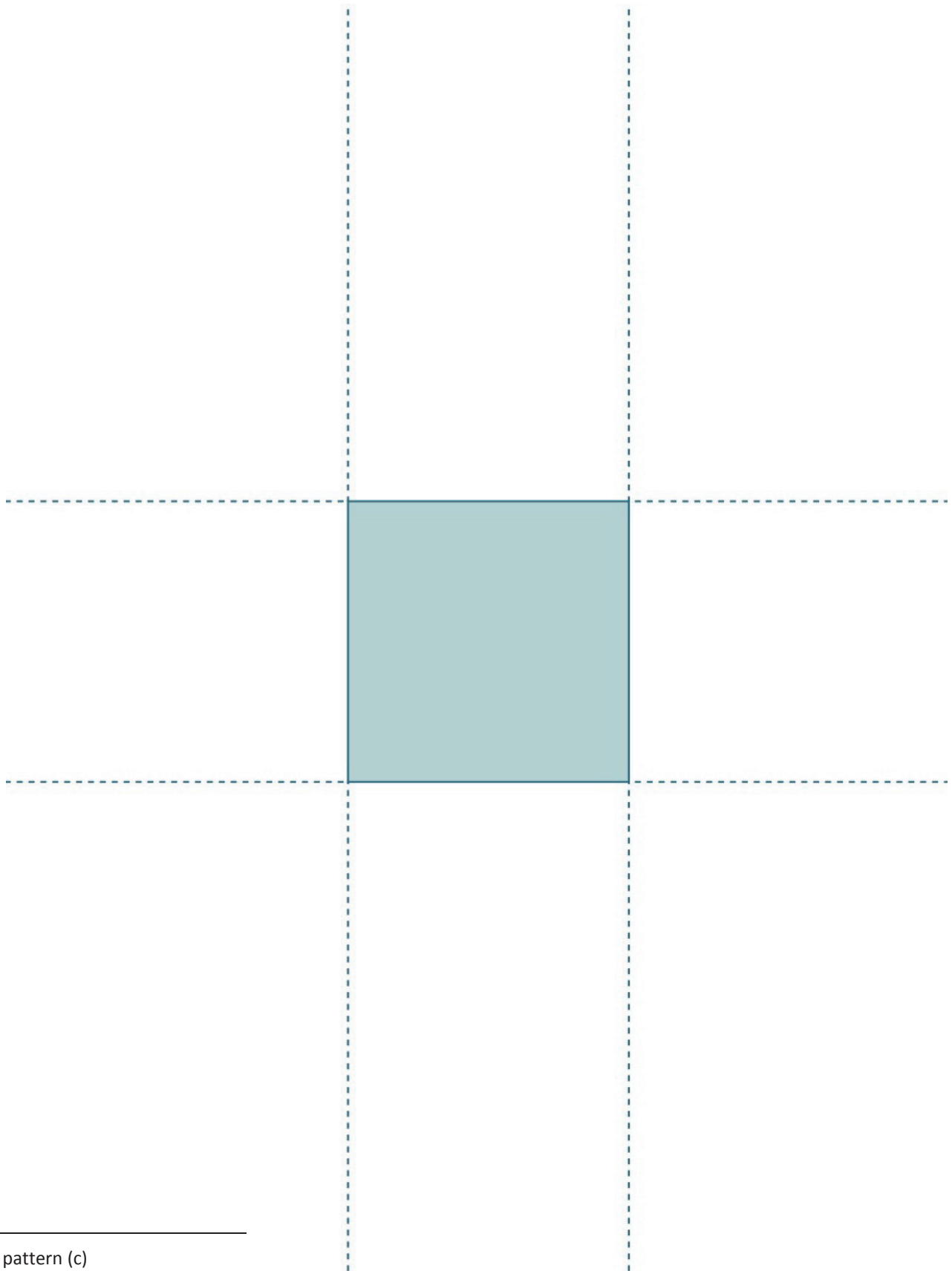
Note: Be sure to set printer to *actual size* before printing.



box pattern (a)

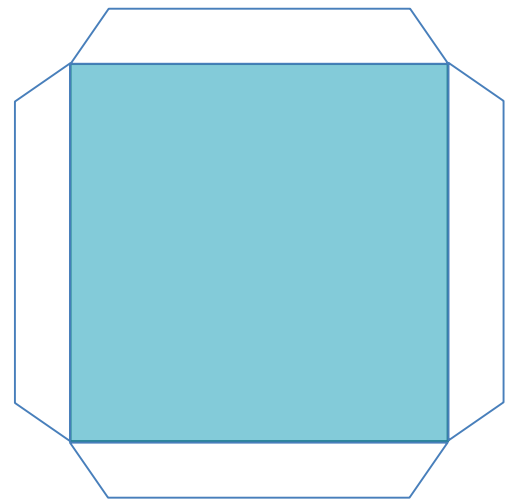
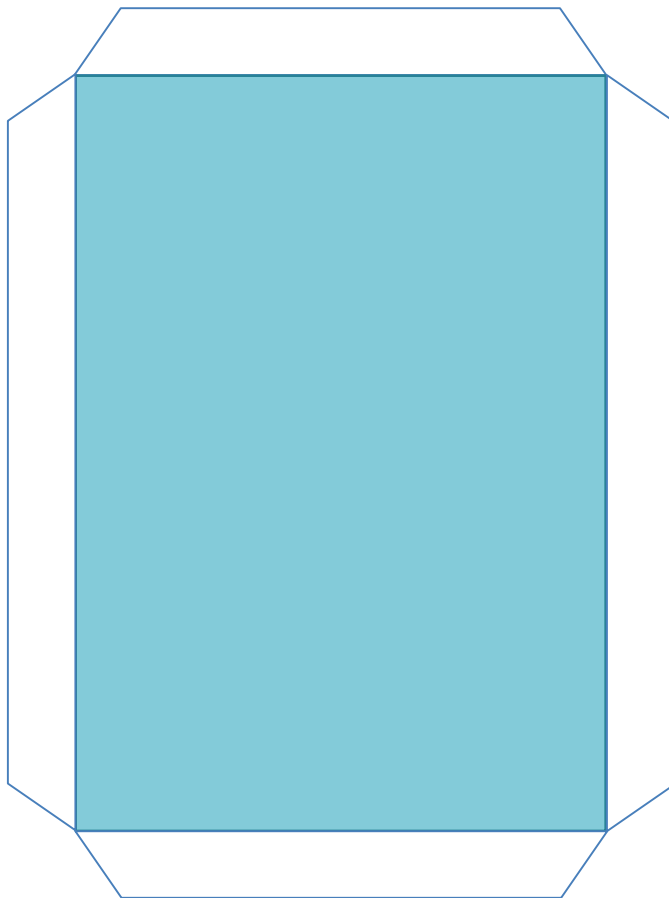


box pattern (b)



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box pattern (c)



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lid patterns

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Date \_\_\_\_\_

## Evaluation Rubric

CATEGORY	4	3	2	1	Subtotal
<b>Completeness of Personal Project and Classmate Evaluation</b>	All components of the project are present and correct, and a detailed evaluation of a classmate's project has been completed.	Project is missing 1 component, and a detailed evaluation of a classmate's project has been completed.	Project is missing 2 components, and an evaluation of a classmate's project has been completed.	Project is missing 3 or more components, and an evaluation of a classmate's project has been completed.	(× 4) _____/16
<b>Accuracy of Calculations</b>	Volume calculations for all prisms are correct.	Volume calculations include 1 error.	Volume calculations include 2–3 errors.	Volume calculations include 4 or more errors.	(× 5) _____/20
<b>Neatness and Use of Color</b>	All elements of the project are carefully and colorfully constructed.	Some elements of the project are carefully and colorfully constructed.	Project lacks color or is not carefully constructed.	Project lacks color and is not carefully constructed.	(× 2) _____/4
					<b>TOTAL:</b> _____/40

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 evaluation rubric