DIY Hydrophone

Grades K-2

Student Activity Workbook

Name: _____

Date: _____

Engineering Notebook

# DIY Hydrophone

I Before starting your experiment, <u>draw</u> your DIY hydrophone and how you have placed the hydrophone in the water.
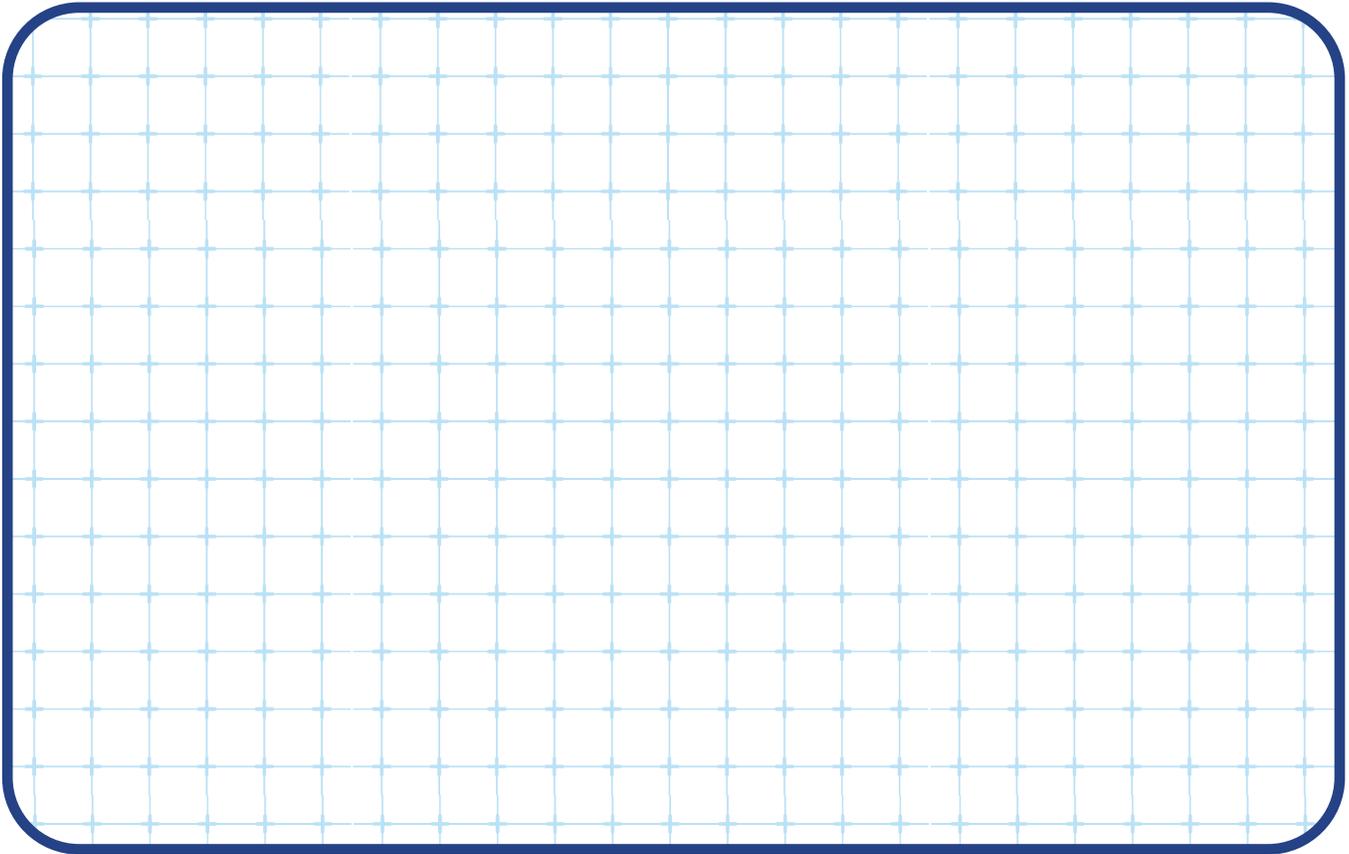
2 Inside each box, <u>draw</u> and <u>label</u> what objects you tested with your hydrophone. Under sound, use the text box below and <u>describe</u> the sound you heard when the object hit the bottom of the container.

Object 1	Object 2	Object 3
_____	_____	_____
Sound:	Sound:	Sound:
_____	_____	_____

Text Box:

Soft   Quiet   Loud   Gentle   Silent

High   Low   Explosive   Faint   Sharp

Fun Fact!
The first hydrophone was invented in 1914. It was designed as a way to locate icebergs following the Titanic disaster.

3 Listen to the sounds being made when objects are dropped. How do you think sound waves move in the water and through the hydrophone? In the box below, sketch you listening to the sounds in the water. Then draw how you think the sound waves travel to your ear.
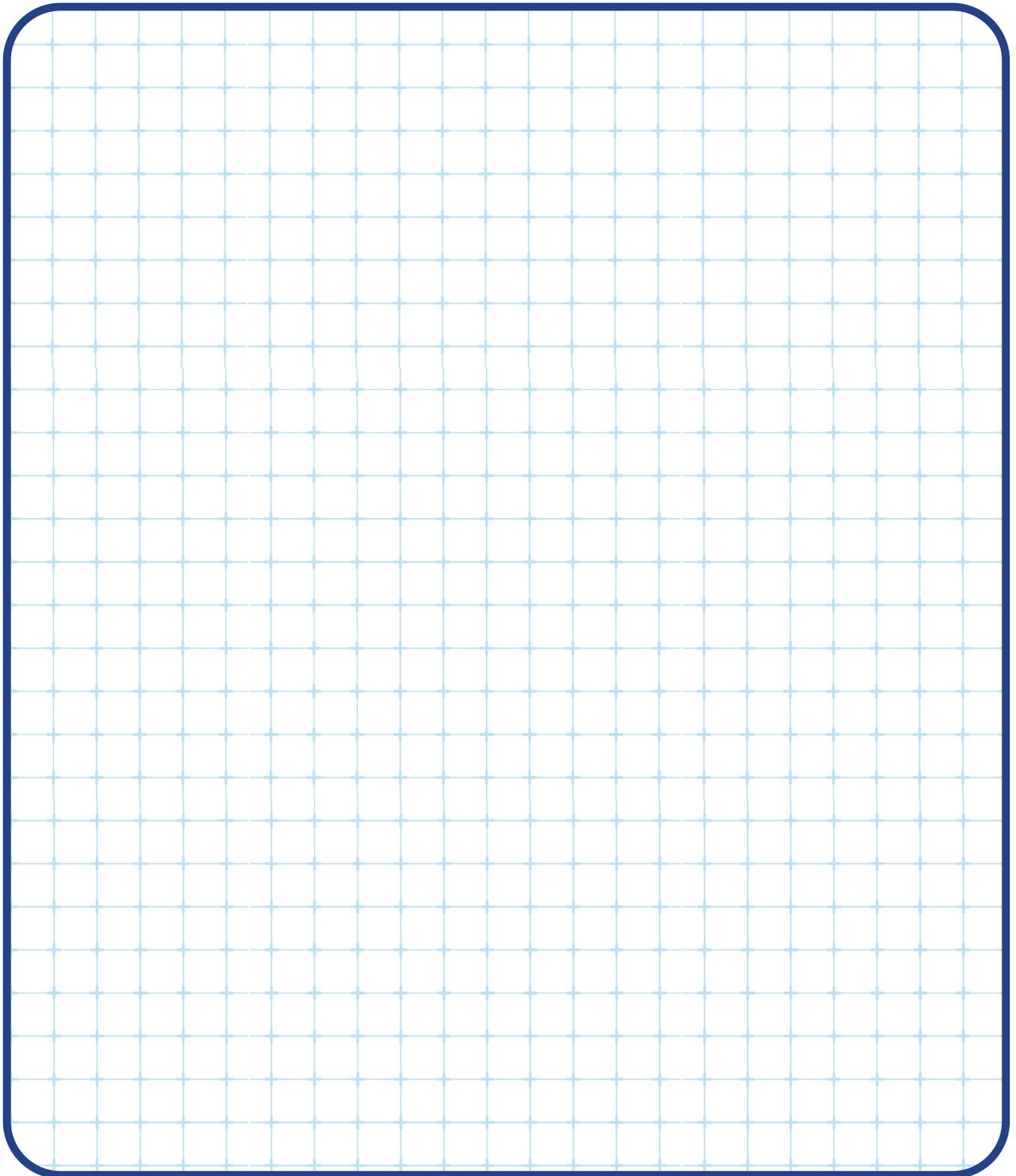
Extension Activity:

4 Use your plastic cup telephone with a partner. Say "telephone" softly into the cup. Then say "telephone" in a normal volume into your cup. Could your partner hear you? Which was louder: the first word or the second word? Why do you think this happened?
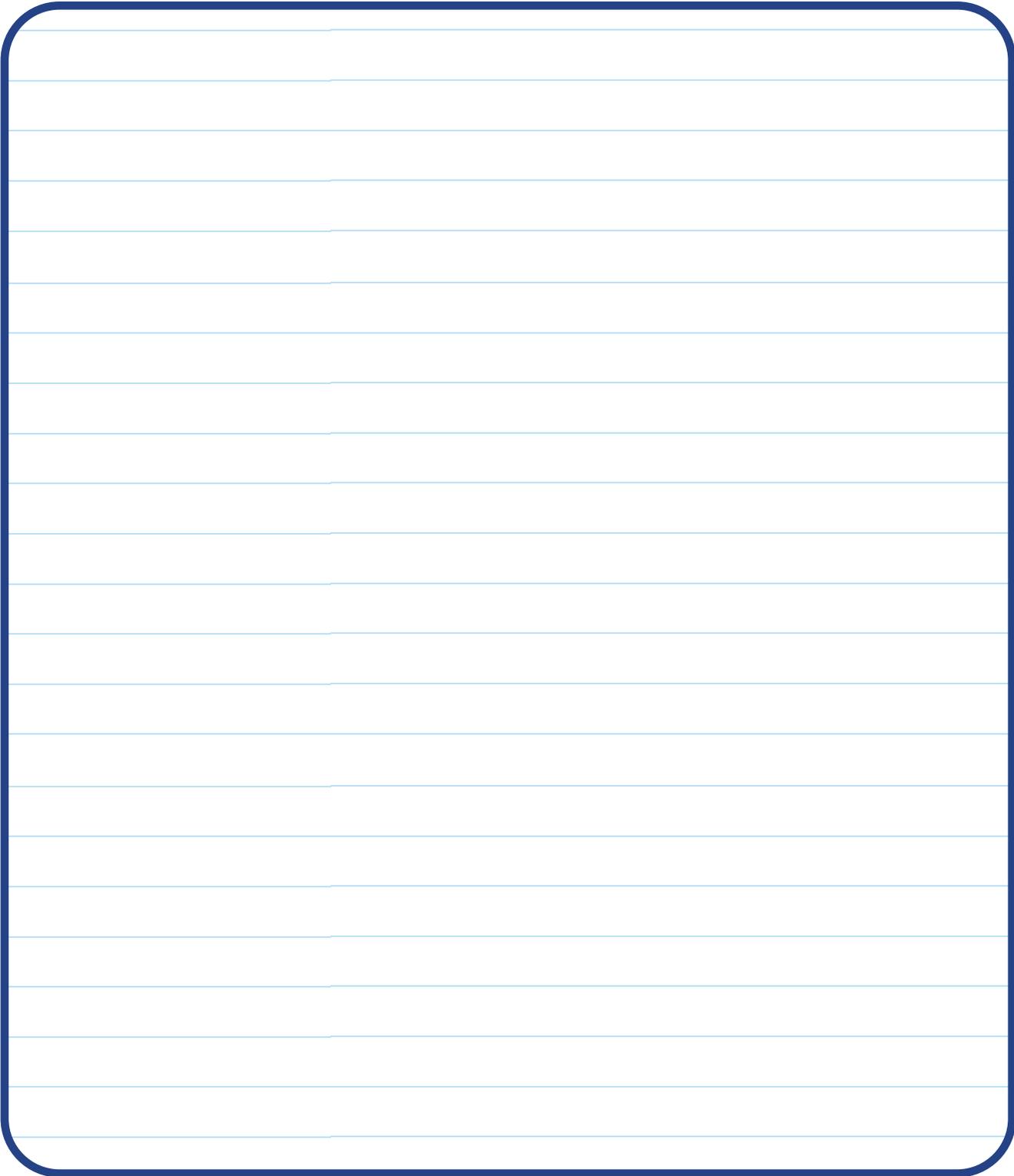
5 Do you think the sound waves from your first or second word had more energy? Why?

Notes
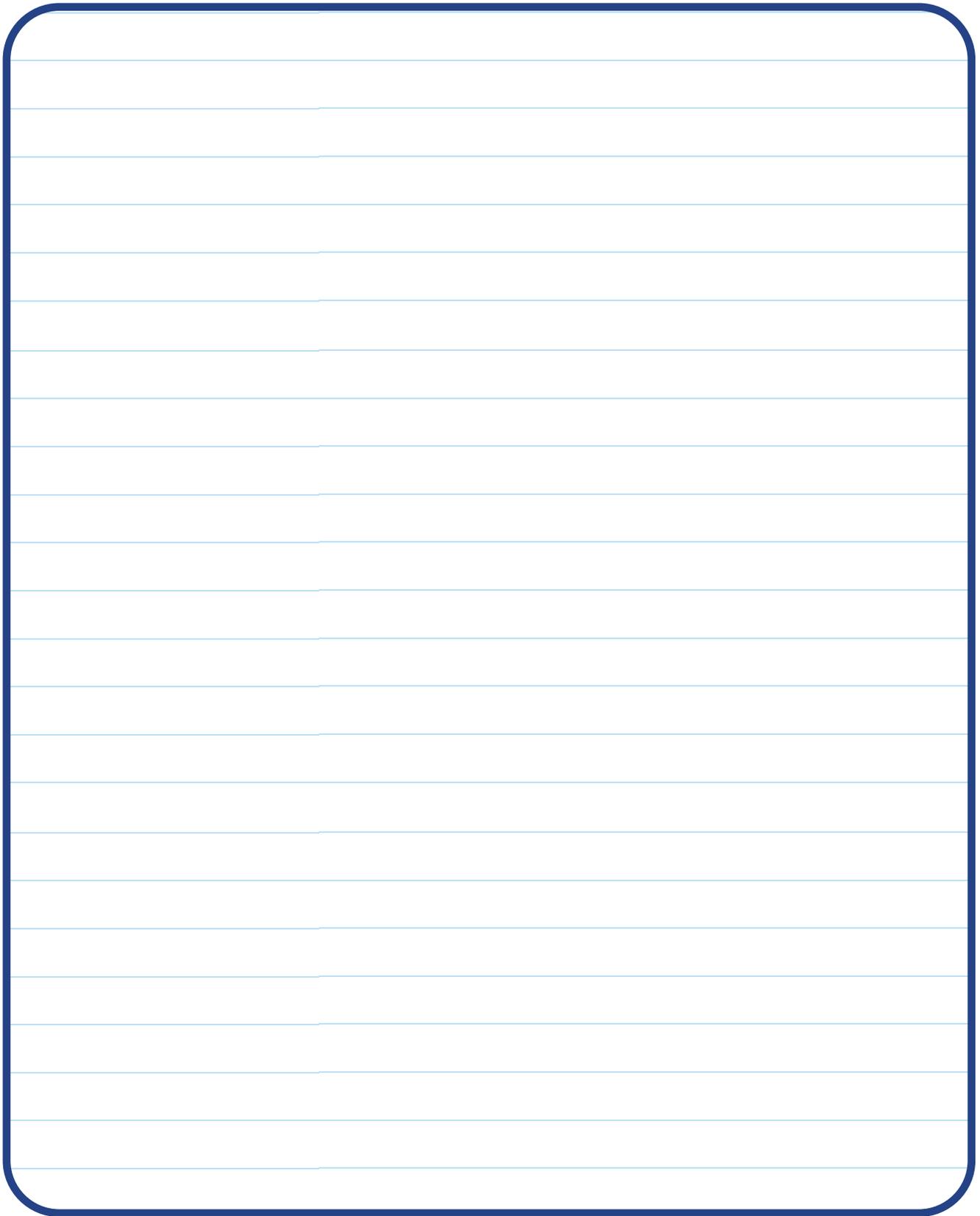
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