

## Instructions

Complete each section carefully and use your best handwriting. Have fun while learning! 🖋️

### English

Read the passage below and answer the questions:

#### The Rising Tides

As the full moon approached, the coastal village prepared for the king tide. The ocean, swollen with the moon's gravitational pull, began to rise. The villagers watched as the waves slowly crept higher and higher up the shore. The children laughed and played, skipping stones in the unusually high water. But the elders knew the power of the tides and warned everyone to stay safe.

1. What is the main idea of the passage?

2. How does the main character feel about the king tide? Use evidence from the text to support your answer.

3. Write a descriptive sentence about the setting.

4. Imagine you are one of the children in the story. Write a short poem about your experience.

5. Word Bank: Use these words to fill in the blanks: moon, waves, shore, power, safe

### Math

Solve the following problems related to tidal measurements:

1. A tidal wave measures 5.2 meters above sea level. Convert this to centimeters.

2. If the average tidal range is 3.8 meters, and the high tide is 2.5 meters above sea level, what is the low tide level?

3. A bridge is 12.5 meters above the water at low tide. How much higher is it at high tide?

4. If the tidal cycle repeats every 12 hours, how many high tides occur in a 24-hour period?

5. Calculate the volume of water moved by the tide, given the area of the bay is 1.2 square kilometers and the average tidal range is 3.8 meters.

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## Science

Answer the following questions about tidal effects:

1. What causes the tides? Explain your answer.

2. Why do the tides have a greater effect on the oceans than on the atmosphere?

3. Draw a simple diagram to show how the moon influences the tides.

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4. What are some effects of the tides on coastal ecosystems? Explain.

5. What are some ways humans can protect shorelines from tidal erosion?