

Worksheet -Motion

1. Maya is sitting in a fast-moving train next to her friend Sam. Outside the window, she sees trees moving backward relative to her.

Question: Is Sam moving or at rest with respect to Maya? Why?

2. You are sitting in the backseat of a moving car next to your friend.

Question: a. Are you moving or at rest compared to your **friend**?

Question: b. Are you moving or at rest compared to a **tree outside**?

3. While making breakfast, you notice, water dropping straight down from a leaky tap.

Question: What type of motion does the falling water drop show?

4. A student plucks a stretched guitar string. The string moves rapidly up and down to produce sound.

Question: What type of motion is the guitar string undergoing?

5. A driver turns the steering wheel of a car to make a turn.

Question: Does the steering wheel undergo **linear motion** or **rotational motion** as the driver turns it?

6. You push to open a classroom door attached to its hinges.

Question: Is the movement of the door an example of rotational motion? Why?

7. During the spin cycle of a washing machine, clothes are pressed against the inner wall of the cylindrical drum as it spins rapidly.

Question: What type of path are the clothes following along the inside wall of the drum?