

# Swinging Back and Forth

**Did You Know?** A pendulum is a weight that hangs from a point and can swing back and forth. The time it takes for a pendulum to swing back and forth depends on the length and weight of the pendulum and also the force of the push.

A tire swing is one example of a pendulum.



- 1** Josie pushes Max on a tire swing. Max swings for 9 seconds with each push. Complete the chart to show the amount of time Max swings with 1, 2, 3, 4, and 5 pushes.

Push	Swing Time

- 2** How many pushes are needed for Max to swing at least 60 seconds? Explain.

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- 3 Extension** How long will Max swing if Josie pushes him 10 times on the swing?

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