

SWINGING PAINT PENDULUM

A **PENDULUM** is an object that hangs from a fixed point and swings freely. Once it starts to move gravity pulls it back to the centre causing it to swing back and forth. Swings and wrecking balls are pendulums.

GRAVITY is an invisible force that pulls objects to the centre of the planet. It's the force that keeps us from floating away and makes things fall down.



CREATE a paint pendulum using string; paper cup; scissors; hole punch; tape; paper; paper towel rolls; wooden dowels and watery paint. Use the paint pendulum to create a variety of patterns. Experiment with how you use the pendulum. Record your observations and draw some conclusions.



PRESENT your paintings in a small sharing circle. Before presenting turn and talk to a partner to practise what you want to say. Start by explaining how you made the patterns. Next explain **how** you made your decisions about what to do – “I decided to try this by . . .” Then explain **why** you chose one of the processes – “I chose to do this because . . .” Talk about how you made the work. Describe the parts you like the best.



RESPOND to your classmates' ideas. Ask questions about things that make you curious, e.g., “What did you mean when you said . . . ?” How did the force you swung the pendulum with affect the design? Did anyone else find the same thing? Describe ideas you would like to try if you did this again. Explain why.



CONNECT how you made your pendulum designs with other ways you have experienced a pendulum. For example, did you ever make a tire swing in your backyard? How have engineers made use of pendulums to design machines for work in construction, recreation, science and art? Work with a partner to list the different ways pendulums are used in everyday life.