

DUNE EXPLORER CHALLENGE

Explore how sand, water, and wind shape dunes and affect plants and animals

Materials

- Small cups, spoons, or shovels
- Water (bottle or small cup)
- Sand (from the dunes or a container)
- Notebook and pencil for observations

Fun Facts

- The tallest dunes in North America reach over 750 feet!
- Medano Creek flows along the base seasonally, helping shape the dunes.
- Wind and water constantly reshape dunes, creating unique patterns and habitats.

Instructions

1. Build Your Dune

- Use sand to create a small mound in your campsite area or in a container.

2. Test Water Flow

- Slowly pour water over the dune. Watch how the sand shifts or forms small channels.

3. Add Wind (Optional)

- Use your hands, a fan, or even blow gently to see how “wind” moves the sand differently from water.

4. Observe and Record

- Draw your dune and label areas where water or wind caused the most change.
- Note any patterns: Which slopes held water? Which areas collapsed or shifted?

Sketch Challenge

On another page, draw your dune experiment or imagine a desert creature navigating your sandy landscape!

Explore Further

- Imagine animals living here: How would they move across shifting sand?
- Discuss as a family: How do plants survive in dunes? How might dunes protect inland areas from wind or flooding?