What Is Climate Change?

Melting Sea Ice

Set up two small play trays (plastic freezable food containers are perfect for this), cover in water and freeze overnight.

Place polar animals onto each. Put one back into the freezer and the other somewhere warm, making sure one melts and one stays frozen.

Ask the children what happens to the polar bear's home in each.

Rising Sea Levels

Place plastic figures or building brick buildings in a large activity tray each. Fill each tray with ice cubes. Put one in the coolest area you can find and one in the warmest area – outside in the sun, or a warm cupboard in your classroom. Children then take photos and measure the water level with a ruler.

Leave the trays for as long as it needs to melt. Then, take another photo and measure the water level again.

Ask children what the difference in the sea levels were.

Which water level rose the quickest? Why?

Soil Change

Place soil in two trays. Water one really well and leave the other dry. Put the dry soil on the windowsill or somewhere it will get plenty of sun. After a couple of days, add water to the dry soil. Watch what happens. The water should run off the soil and it should break up. Talk about how a flood after a drought would do the same to crops. How would this affect farming communities?

Urban Heat Islands

Urban areas are warmer than rural areas. This is because urban areas have less green space and lots of tall buildings made from dark materials that absorb heat. Place a black T-shirt and a white T-shirt side by side in the sunshine. After a short while, touch each T-shirt. What do you notice about the temperature of each one? The white T-shirt, like the rural environment, reflects the heat. The black T-shirt, like the urban environment, absorbs it. Think about what it must be like to live and work in the city during the hottest months of the year.