Exploring the Albedo Effect Outdoors Worksheet

Make a Prediction

You will place each thermometer in one of the following locations: on or near the edge of some blacktop pavement, a grassy area, and on or near a patch of dirt. Before you go outside, use **Data Table 2** to predict which locations will experience the *greatest* change in temperature and which will experience the *smallest* change in temperature over a 10-minute period.

Data Table 1: Outdoor measurement of air temperatures

Location/Type of Coverage (ex. grass/shaded)	Starting Temperature	Midpoint Temperature	Ending Temperature	Change in Temperature (Ending Temp. – Starting Temp.)

Data Table 2: Ranking of Temperature Change

Predicted	Actual
Greatest Temperature Change	**Greatest Temperature Change**
Smallest Temperature Change	**Smallest Temperature Change**

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Discussion Questions

1. Which surface showed the largest increase in temperature?

2. How did your predictions line up with what you observed?

3. Describe each of the surfaces/locations you tested. Think about color, shape, size, proximity to other surfaces/shade, etc. Use your descriptions to analyze your temperature results and rankings. Why do you think you got the results that you did?

4. What is the relationship between color and the temperature increases you observed?