

Name	
Class .	

In this adventure, you will compare the heating rates of wet sand and dry sand.

Time (in seconds)	Temperature of Dry Sand (°C)	Temperature of Wet Sand (°C)	
0			
30			F
60			
90			
120			
150			
180			
210			
240			
270			
300			
330			

1. What do the slopes of the lines on the graph represent?

2. What do the differences in the two slopes indicate about the heating rates of the wet and dry sand?

3. What does the *y*-intercept represent?

**4.** Compare the temperatures of the wet and dry sand at the same time intervals. How does water affect the heating of the sand?

5. Compare the change in temperature for the dry sand and wet sand.

Dry sand: starting temp. ( $\_$ °C) – ending temp. ( $\_$ °C) = ( $\_$ °C)

Wet sand: starting temp.  $(\__°C)$  – ending temp.  $(\__°C)$  =  $(\__°C)$ 

6. \_\_\_\_\_sand heats faster in the sun than\_\_\_\_\_sand.