Year 3 Hardcore Heat

STUDENT WORKSHEET

With Street Science, you became a junior scientist, conducting chemical reactions to transform heat energy and testing the conductivity of materials.

1. Use the **word bank** to complete the information about **heat production**.

Heat is a form of _____. It can be produced from different forms of energy through events such as _____ or use of _____. _____ reactions can both absorb and _____ heat energy. We can feel and measure the effects of heat flow using a _____.

WORD BANK:	thermometer	energy	friction	produce	electricity	Chemical

2. We used digital thermometers to **measure** and record how much heat was absorbed or produced in two **chemical reactions**. Your teacher can give you your results sheet or the class average results to help you calculate the change in **temperature** for each reaction.

GREEN Reaction – temperature increase

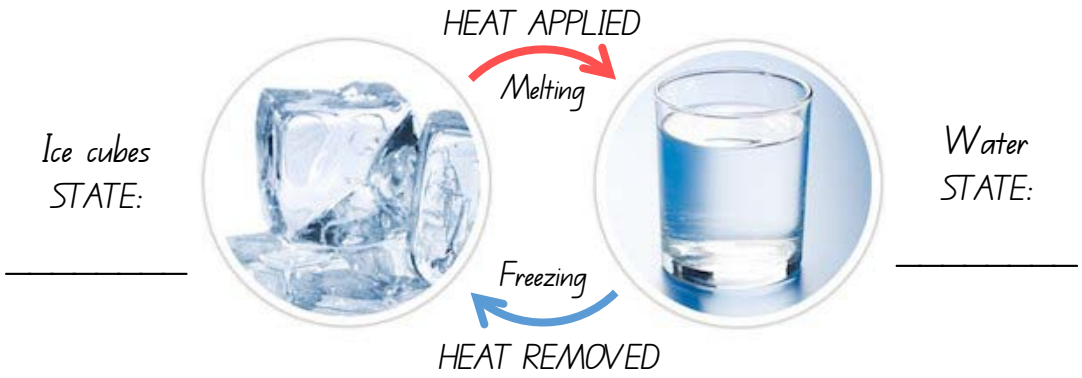
End temperature	MINUS	Start temperature	EQUALS	Temperature change
°C	–	°C	=	°C

YELLOW Reaction – temperature decrease

Start temperature	MINUS	End temperature	EQUALS	Temperature change
°C	–	°C	=	°C

Which reaction had a larger temperature change? _____

3. We tested how heat can be **conducted** through different materials by melting ice cubes. Name which states of matter we observed.



Predict what would happen to liquid water if we applied more & more heat energy? _____

_____

4. Draw the objects which we tested and label the materials they are made of. State whether or not the ice melted in each material.

Object drawing					
Material					
Did the ice melt?					

Which object was the best conductor of heat? _____

Extras for Experts!

Science Steve wants to keep his lunch hot until break. Should he use a metal or foam bowl? Explain why?