

# Heat

## Task 1: Different Types of Heat Transfer & Good Conductors of Heat



### Predict

1. Previously, you have learnt about good conductors and insulators of heat. So, which pot do you *think* will take the shortest time to cook the pasta?

\_\_\_\_\_

2. What of the following options is the best and faster way to thaw the meat?

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### Materials needed

- Ceramic, cup
- Glass cup
- 2 Copper cups
- 1 packet of raw pasta
- 1 packet of Salt
- 1 hotplate
- 4 stopwatches
- 100ml beaker
- laboratory thermometer



### Procedures

#### Group Members' Names:

- (1) \_\_\_\_\_
- (2) \_\_\_\_\_
- (3) \_\_\_\_\_
- (4) \_\_\_\_\_
- (5) \_\_\_\_\_

1. Fill the four cups with 100ml of tap water each and put some salt into all except for one copper cup.
2. Put 6 to 7 raw pasta into each cup.
3. Place the three cups onto the hotplate.
4. Turn the knob to "high".
5. Start timing once you heat up the cups.
6. Check the temperature every 10 seconds.
7. Once the water in each cup reaches 100°C, record the time taken into the table.



### Findings

Material of the Cup	Time Taken (second)	Any changes (texture/colour/size) in the pasta? Any other remarks?
Ceramic		
Glass		
Copper		
Copper (without salt)		

