AI

TITLE:

DATE:

NAME:

PARTNER:

rmomete

MATERIALS:

Thermometer and holder Hot Paws

500 mL Beaker 300 mL of ice

Hot Plate

Stop watch

HYPOTHESIS:

AIM: To determine if temperature affects the state of matter and if so, how.

PROCEDURE:

1. Place ice in beaker
2. Turn hot plate to maximum
3. Wait until hot plate is at proper temperature
4. Place thermometer into ice (NOT contacting the bottom of beaker)
5. Take initial reading
6. Place beaker on hot plate
7. Take a reading every minute until 4 minutes past boiling
8. Record results after each reading

OBSERVATIONS:

|  |  |  |
| --- | --- | --- |
| Time (minutes) | Temperature (oC) | State of Matter (S, L or G) |
| 0 |  |  |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |
| 11 |  |  |
| 12 |  |  |
| 13 |  |  |
| 14 |  |  |
| 15 |  |  |
| 16 |  |  |
| 17 |  |  |
| 18 |  |  |
| 19 |  |  |
| 20 |  |  |

CALCULATIONS (Graphs):

ANALYSIS: Answer the following questions.

1. Can water exist as a solid at 0 oC? Why or why not?

2. At what temperature does water become a gas? How do you know (why)?

3. What trends(s) do you notice?

CONCLUSION: Write your conclusion below