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| Lesson 4: States of Matter: Changes with Temperature CHOCOLATE IN YOUR HAND | Week 4 |
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INVESTIGATION QUESTION

What causes matter to change between solid and liquid states?

HYPOTHESIS

Hint: try writing it as "If _____, then _____, because _____."

DATA TABLE — Check in every 30 seconds

| Time | Direct Palm (texture, shape) | Foil-Wrapped (texture, shape) |
|------|------------------------------|-------------------------------|
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Freezer check — record what happens after placing melted chocolate in the freezer:

| Time in Freezer | What Does It Look Like? | What Does It Feel Like? |
|-----------------|-------------------------|-------------------------|
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FILL IN THE BLANKS

Raising temperature causes _____ (solid → liquid).
 Lowering temperature causes _____ (liquid → solid).
 Heating further causes _____ (liquid → gas).

ANALYSIS

1. What was the ONLY difference between the two pieces of chocolate? What caused one to melt?

2. After re-hardening in the freezer, was it still chocolate? What changed, and what stayed the same?

3. Is this change reversible? How do you know? Name one other material that behaves the same way.

CONCLUSION

Temperature causes matter to change state by:
