Name: _____ Date: _____ Section: _____

Model Evaluation Form

Scientists use models to understand things that are too big, too small, too fast, or too slow to study directly. Let's evaluate the model you used today! Remember that all models have limitations. The goal is to understand how models can be useful tools for scientific understanding. This form will help you practice important science skills.

NGSS Standards:

- MS-ETS1-4: Develop a model to generate data

- Science Practice: Developing and Using Models

- Crosscutting Concept: Systems and System Models

Model Name: _____

Model Location: _____

Part A: Describe This Model

1. What does this model look like? (MODE)

Check all that apply:

- ☐ Has pictures or drawings
- ☐ Is something I can touch

- [ ] Uses symbols (like arrows or +/-)
- [ ] Uses words to explain
- [ ] Is flat like paper (2D)
- [ ] Has depth like a sculpture (3D)
- [ ] Doesn't move
- [ ] Moves or animates
- [ ] Is on a computer
- [ ] I can control it

Draw or describe this model in 1-2 sentences: _____

_____

_____

2. How much like the real thing is it? (ACCURACY)

What does it get RIGHT? (List 2 things)

•

_____

•

_____

What does it LEAVE OUT or CHANGE? (List 2 things)

•

_____

•

_____

3. Why was this model made? (PURPOSE)

Check the reasons that fit:

- ☐ To help us learn
- ☐ To show how it works
- ☐ To guess what will happen
- ☐ To see things we normally can't
- ☐ To test an idea
- ☐ To compare to something we know
- ☐ To show size differences
- ☐ To copy what really happens

The MAIN reason for this model: _____

4. Could this model change? (PERMANENCY)

Pick one:

- ☐ This model shows facts that won't change
- ☐ This model is based on strong evidence but might be updated
- ☐ This model is our best guess right now
- ☐ This model is just one idea among many

Why do you think so? _____

_____

Part B: Think About It

5. What's Good and Not So Good?

This model really helps me understand: _____

_____

This model doesn't help with: _____

_____

6. Design Challenge!

If YOU could make this model better:

My first change: _____

Because:

_____

My second change:

_____

Because:

_____

Part C: Team Talk Time!

7. Small Group Discussion (8 minutes)

Get with 2-3 classmates and talk about:

1. How did each person describe the model? Same or different?

2. What's the most helpful part of this model?

3. What's confusing or missing?

Our team's favorite thing about this model: _____

_____

Our team's biggest question about this model: _____

_____

8. Models in Science

Discuss with your group:

- Why can't scientists always study the real thing?

- What would happen if we only had one model for everything?

Write one idea from your discussion: _____

_____

Part D: Make Connections

9. Share with a Friend

Find a partner from a different group.

Partner's name: _____

One cool thing they said about the model: _____

_____

One thing we disagreed about: _____

_____

Part E: Wrap It Up

10. Model Detective

Finish these sentences:

The most important thing I learned about models today is _____

_____

If I were teaching someone about this model, I would make sure they knew _____

_____

11. Quick Check

Rate yourself:

- I can explain what this model shows: 😔 Not yet 😐 Getting there 😊 Got it!

- I can identify what's missing from this model: 😔 Not yet 😐 Getting there 😊 Got it!

- I understand why scientists use models: 😔 Not yet 😐 Getting there 😊 Got it!