



PhET's Reflection Rubric

Classroom Preparation

- Computers were ready for use.
- Student-to-computer ratio was effective.
- Arrangement of classroom supported student collaboration and teacher facilitation.

Activity Sheet

- Students understood activity sheet prompts and tables.
- Students were guided by the activity sheet, but not distracted away from sim exploration.
- Students used the activity sheet to record observations.
- Activity Sheet avoided procedural directions on how to use the sim.

Pre- and Post-Assessment (Optional)

- Students understood the questions and prompts.
- Teacher was informed by students' responses.

Reflections:

Topic Introduction and Motivation

- Students were engaged by the topic introduction.
- Students discussed connections to everyday life experiences, to prior learning, or to future learning.

Sim Play Time

Students:

- Were allowed 3-10 minutes for free exploration of the sim.
- Fully explored the simulation.
- Began asking questions (to themselves or group) about the topic.

Teacher:

- Was engaged in observing student-sim interactions.
- Utilized student sim use and discoveries during facilitation.

Reflections:

During Sim Activity

- The activity aligned with the learning goals.

Students:

- Read learning objectives out loud.
- Discussed learning objectives.

Student ideas:

- Were solicited and valued.
- Generated classroom discussion.

Students had:

- Time for individual/group sim exploration and sense-making.
- Time for classroom synthesis discussions.
- Control of their own (or shared) computer.
- Opportunities to demonstrate and/or describe relevant sim findings.

Students were encouraged to:

- Share ideas with their partner/group.
- Answer their own questions through experimentation and partner/group discussion.
- Actively participate in group and class discussions
- Construct arguments while communicating with their peers.
- Infer from evidence found during the sim use.
- Discuss the nature of science (e.g. use of models).
- Reflect on what they learned, and the learning process.

Teacher:

- Integrated checks for understanding to inform instruction.
- Utilized differentiation/extension opportunities effectively.
- Responded to suggestions and confusions appropriately and effectively

Reflections:

Areas for facilitation improvement:

- 1)
- 2)
- 3)

Standout student questions and ideas:

- 1)
- 2)
- 3)