

The Three Acts of a Mathematics Lesson

Act I:

- It provides the visual – either a photo or video – intended to hook the viewer into the task;
- It provokes questions.
- It poses a question that's very short, that features little academic language, that leads to a guess as well as more questions. Students are involved in defining the question.
- Possible Questions:
 - What do you notice?
 - What do you wonder?
 - What questions do you have?
 - What's your guess?
 - What does a wrong answer look like?
 - What is an answer that would be way too high? Too low?

Act II:

- It's the beginning of the modeling process.
- It asks, "What more information do you need to know to answer our question?"
- It asks, "How would you get it?"
- Students need to gather tools, information, and resources to answer the question.
- Once students decide what information they need, the teacher will give the information she has.
- Teachers should be a resource here, including as someone who can explain the differences between models and can demonstrate procedures.
- As students finish, the teacher should extend their thinking by posing sequel tasks or asking two students to explore their different approaches.

Act III:

- It confirms the answer to the modeling task in the world itself, not in the answer key.
- It requires a conversation about sources of error. Why was our answer close but not exact? What did our model not include that it should have? What did our model include that it shouldn't have?
- It states the objective of the day. Students come up with a title for their lesson. The teacher provides her own. The students know what was intended to be learned.