The first day, students watch the Science Minute video and answer the Day 1 question. You may choose to show the video any of the later days when students need a refresher (or because some students missed the first day).
Each day's activity is based on the Science and Engineering Practices listed below.

Sample answers are listed on the next page.

Link to video: stevespangler.com/ss-video/445257408

The beaker icon in the lower left corner represents the approximate grade level.

DAY 1 Practice 1: Asking Questions

DAY 2 Practice 4: Analyze and Interpret Data, or
Practice 5: Use Math and Computational Thinking

DAY 3 Practice 2: Develop Models, or
Practice 3: Plan an investigation

DAY 4 Practice 6: Construct Explanations

DAY 5 Practice 7: Engage in Argument from Evidence, or
Practice 8: Obtain, Evaluate, and Communicate Information

DAY 1

Higgins is Steve's cameraman. Write a short script of each one asking the other a question they might have about the experiment or materials needed.

Student responses will vary but might include asking if the balloons were present, if skewers were the right size, and where the camera should be set up.

DAY 2

Calculate the cost of this experiment if you used five balloons that cost five cents each, five skewers that cost three cents each, and a bottle of oil that costs $1.98.

Balloons: 5 x $0.05 =.25
Skewers: 5 x $0.03 =15
Oil: $1.98 =
Total: $2.38 to do the experiment.

DAY 3

Steve gave several great metaphors for this experiment. Choose one to explain or share how you have done this in your life.

Student responses will vary but might include an example from their life experiences.

DAY 4

Create a tweet about how this experiment works. Include a catchy hashtag.

Student responses will vary but might include coating the skewer with oil, and pushing through the non-stressed end.

DAY 5

Write a short story (five or six sentences long) about a part two follow-up to Steve's Skewer Balloon experiment. Include at least five prepositional phrases to add detail.

Student responses will vary but might include suggesting using skewers made of different materials, different sizes of balloons, etc.

Skewer Balloons

DAY 1

Higgins is Steve's cameraman. Write a short script of each one asking the other about a question they might have about experiment or materials needed.

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DAY 2

Create an equation to show the following:

- Calculate the cost of this experiment if you used five balloons that cost five cents each, five skewers that cost three cents each, and a bottle of oil that costs $1.98.
- Show your work below.

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Steve gave several great metaphors for this experiment. Choose one to explain or share how you have done this in your life.
- You have to be able to attack every volatile situation at the point of least resistance.
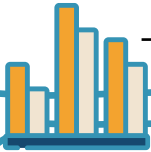- You have to find a solution to a troubling situation with a great plan.

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Create a tweet about how this experiment works. Include a catchy hashtag.

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Write a short story (five or six sentences long) about how many more skewers could be inserted into the balloon before it pops. Include at least five prepositional phrases describing the results.

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