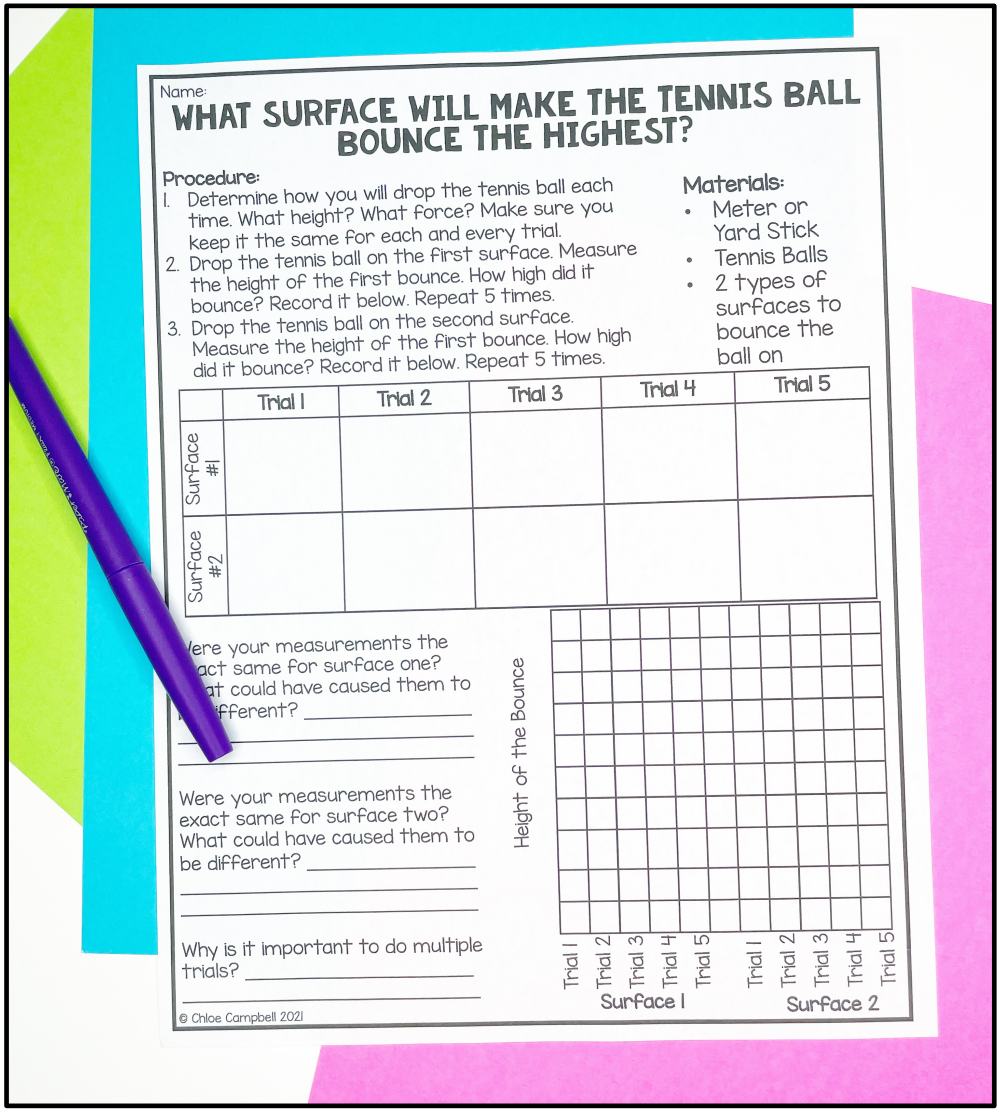
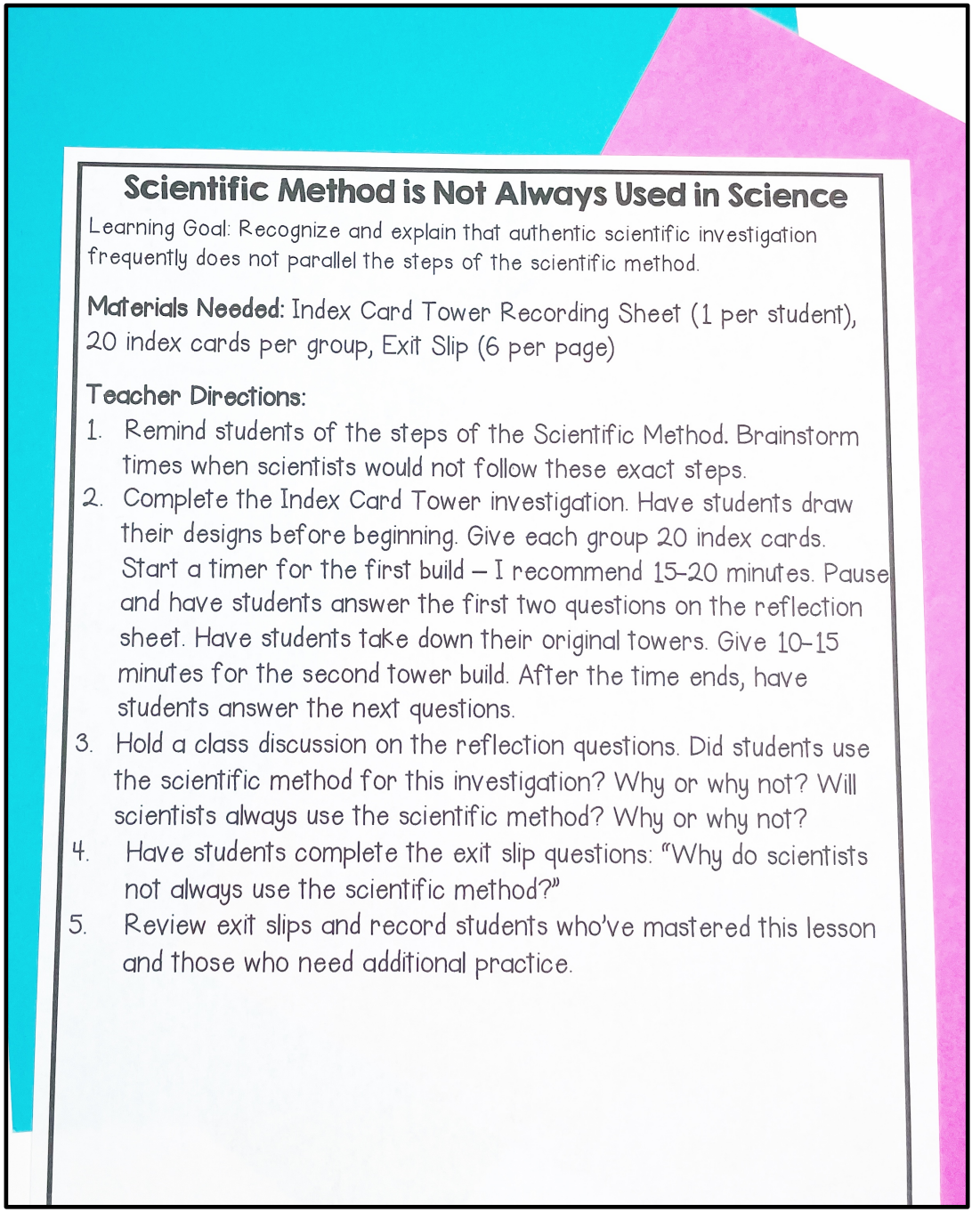
Struggling to find a hands-on way to teach that the scientific method isn't always used during science?



Don't spend any more time planning, searching, or brainstorming. Everything you need is in this easy to use download!

Teacher Directions Page

- Learning Goals
- Materials Needed
- Specific Directions for All Parts of Lesson



Scientific Method is Not Always Used in Science

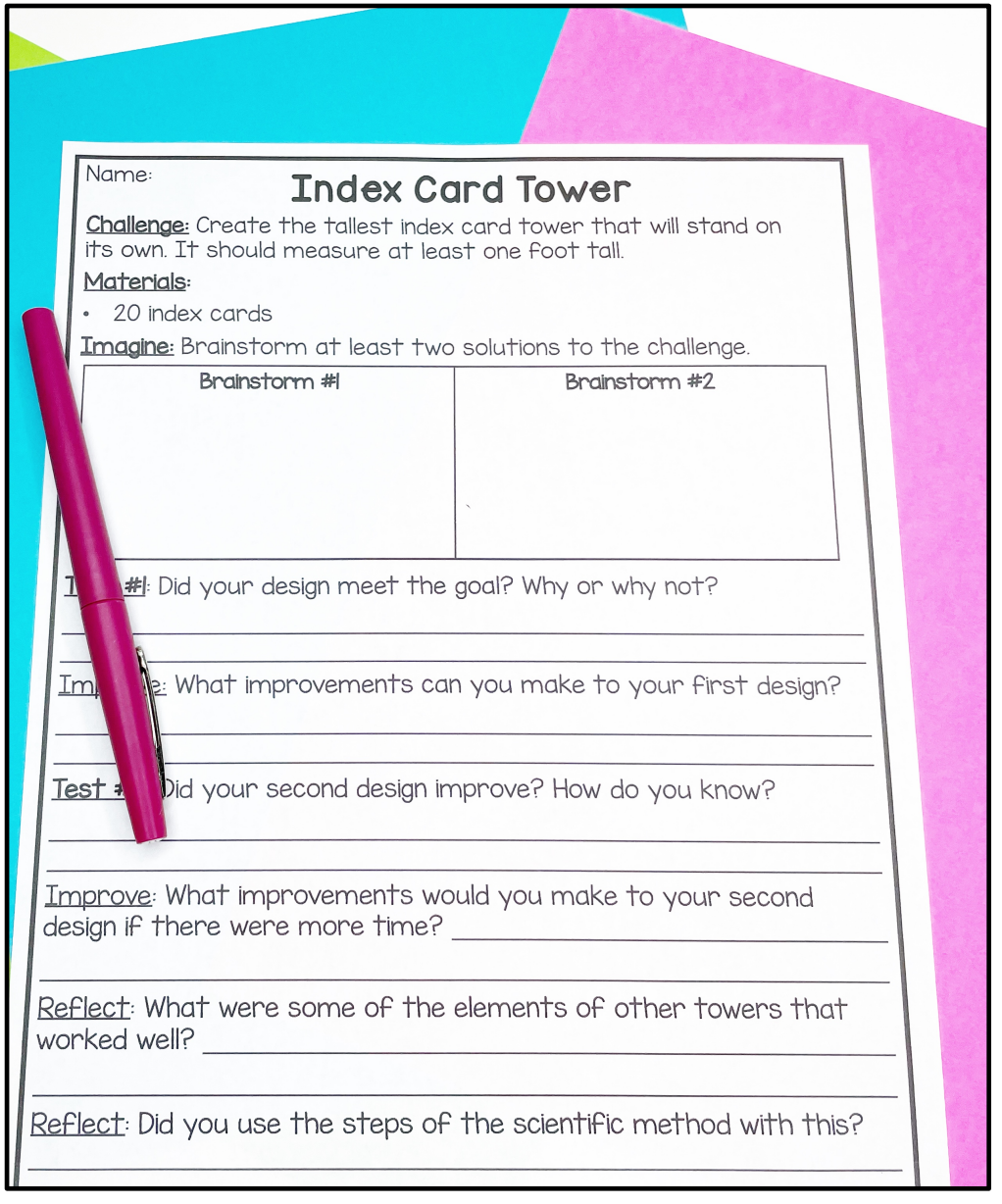
Learning Goal: Recognize and explain that authentic scientific investigation frequently does not parallel the steps of the scientific method.

Materials Needed: Index Card Tower Recording Sheet (1 per student), 20 index cards per group, Exit Slip (6 per page)

Teacher Directions:

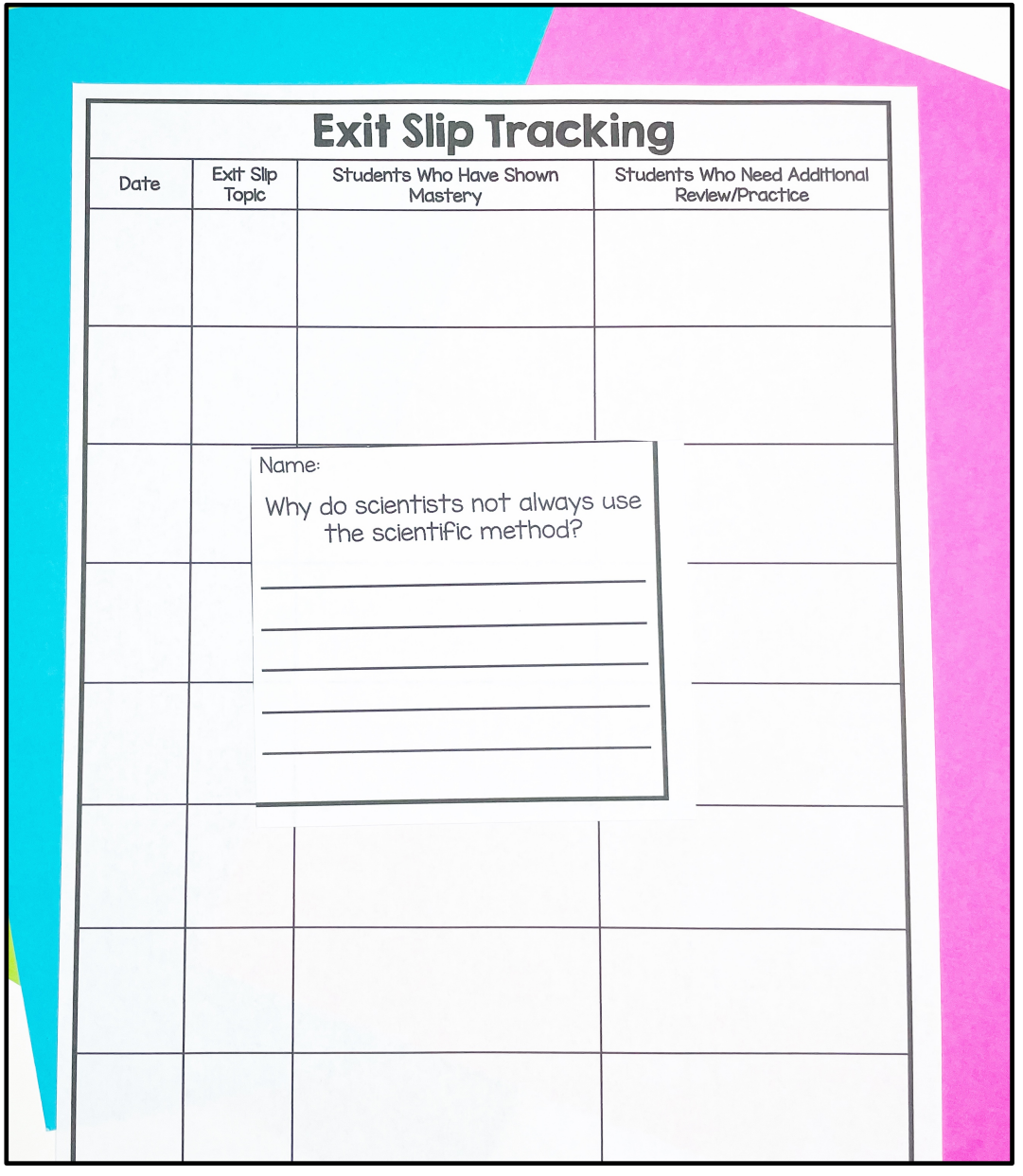
1. Remind students of the steps of the Scientific Method. Brainstorm times when scientists would not follow these exact steps.
2. Complete the Index Card Tower investigation. Have students draw their designs before beginning. Give each group 20 index cards. Start a timer for the first build – I recommend 15-20 minutes. Pause and have students answer the first two questions on the reflection sheet. Have students take down their original towers. Give 10-15 minutes for the second tower build. After the time ends, have students answer the next questions.
3. Hold a class discussion on the reflection questions. Did students use the scientific method for this investigation? Why or why not? Will scientists always use the scientific method? Why or why not?
4. Have students complete the exit slip questions: "Why do scientists not always use the scientific method?"
5. Review exit slips and record students who've mastered this lesson and those who need additional practice.

Experiment



- Recording sheet walks through the experiment process with a focus on the scientific method NOT being used
- Index Card Tower
  - ✓ Lists Materials Needed
  - ✓ Specific Instructions
  - ✓ Perfect way to show that the scientific method steps are not always used

Quick Assessment



Use this simple exit ticket question to measure your students' learning at the end of the lesson.

BONUS: Includes a Mastery Checklist. You can easily keep track of students who need extra practice and students who are ready to move on to the next lesson in one easy place!