

Jamie Miller
Lesson overview

Subject:	Science
Grade:	2 nd
Topic:	Magnets
Concepts:	Magnetic attraction, attract and repel
Essential questions:	<ul style="list-style-type: none">• What do magnets do?• Why are magnets important?• What kinds of items do magnets attract?

Objectives

✓ Students will know:

Opposite poles of a magnet attract each other
Same poles of a magnet repel each other
That magnets attract certain metals, iron and steel

✓ Students will understand:

That magnets are artificial and naturally occurring in our world
That a magnets ability to attract and repel impacts our lives and planet

✓ Students will be able to do:

Explain why magnets attract and repel each other
Define magnetic poles, repel, attract and magnetic field
Give examples of items that magnets attract or repel

**Checking points.*

- Do the “Know” objectives cover the essential information to be learned?
- Are the “Understand” objectives big and transferable ideas of the discipline?
- Are the “Do” objectives are observable and measurable? Do they encompass essential skills?
- Do the KUDs “fit together”-in other words, will they come together coherently?

Range or description of learner needs in your class related to this topic

1. Students who need guidance and students that are self sufficient
2. Students who are creative
3. Students who are analytical

Factors you'll need to consider in developing the RAFT assignment

(Related to time, students, space, materials, etc.)

Students will have a day and a half to work on their projects. The first part of the first day will be spent reviewing what we have learned about magnets. I will then hand out the RAFT assignment and ask students to pick a project from the list to demonstrate their understanding of magnets. Once each student has picked their project, I will make space in the room for those who choose the posters to work. I will also allow students who need a quiet place to work, to go to the library.

Pre-assessment plans:

1. Give students a short questionnaire about magnets:

What is a magnet?

Where do we find magnets?

Name two things that magnets are attracted to?

What does repel mean?

Assessment plans:

1. how work will be graded

Time management

On time completion of the assignment

Following the rubric or guidelines

2. Monitoring student work and progress:

I will initially meet with students in a group based on which project they have chosen. In our meeting I will establish guidelines and hand them a copy so that

they know what my expectations are.
After the initial meetings, I will circulate around the room to answer any questions and give feedback to students on their progress.

Checking work for accuracy, understanding, and quality:

1. Have an established set of guidelines and make sure that all students understand the expectations before beginning the assignment.
2. Ask myself during the grading process if the student's work demonstrates understanding.
3. Quality is determined by the established criteria and my observations of how students used their time.

RAFT assignments

Role	Audience	Format	Topic
magnet	Refrigerator	Explanation essay	I'm stuck on you
South pole of a magnet	North pole of a magnet	Poem	Opposites attract
South pole of a magnet	South pole of a magnet	Song	I'm just not attracted to you but, can we still be friends
magnet	Collection of objects in the classroom	Chart or poster	Who am I attracted to?
Make a deal			

Analyzing you RAFT assignments

1. How are your RAFT assignments alike in intent and structure? How are they different in intent and structure? My RAFT assignments are all alike in that they address the same essential understandings. They differ in the ways in which students can choose to demonstrate and present their understanding and knowledge of magnets. The activities differ based on learning style and interest.

2. What do you see as essential feature of or elements in making sure students are successful with RAFTs?

1. Clear expectations
2. Explanation of expectations
3. Established deadlines and guidelines
4. Monitoring of student work
5. Feedback
6. Explanation of grading criteria

3. What is the link between preassessment and RAFTs?

Pre-assessment is essential for any activity, including RAFT. Pre-assessment allows the teacher to see where students are in relation to where they need to be. This process allows teachers to modify classroom lesson plans and activities to accommodate student readiness.

4. Think of several ways the teachers might have given direction for competing RAFTs successfully when not all students would complete the same task.

1. Give a rubric of general guidelines that apply to all tasks
2. Set clear expectations about grading, time management and student work
3. Have a contract with students
4. Monitor work and give feedback