

Middle/High School

Famous
Scientists

Special
Education

I have also started adding detailed lesson plans to my units. Please leave feedback on if this addition is helpful to you!!

I have included a voice recorded power point show that has automatic slide advancement. Please leave feedback if you find this helpful, and I will go back and add it to my other units.

Preview

By Christa Joy



Famous Scientists Lesson Plan

Preparation

- Print out a vocabulary board for each student to use throughout unit
 - Laminate or place in page protector
- Book
 - Print out, laminate, and bind
 - OR your students can listen to the pre-recorded version
- Vocabulary cards
 - Print out a set of cards onto cardstock and laminate
 - Make one set for each student and also one for the teacher to use in games
- Fact sheets
 - Print out a set on card stock, one for each student
 - Laminate or place in cardstock for durability
 - Make an additional set to use for various activities that require a set

Preassessment (do day 1 before starting lesson)

- Choose the form of the assessment that best fits the learning level of your :
- Give the assessment to assess what your students may already know
- I cannot emphasize enough how important this step is. If you want to see growth, this preassessment is so important!!

Teaching Tips

1. **Color Coding:** this is a really easy way to add more structure to a matching activity. Outline or color in an empty box or sorting label. Outline or color the corresponding picture symbols the same colors. Becomes a color mat task.
 - a. For more info, read more here: <https://specialneedsforspecialkids.org/2015/09/05/using-color-coding-differentiation/>
 - b. I also have a blog post on differentiating one activity 3 ways: <https://specialneedsforspecialkids.org/2018/10/22/differentiating-1-a-3-ways-easily-and-effectively/>

Lesson Plans

18 days

Quick Look

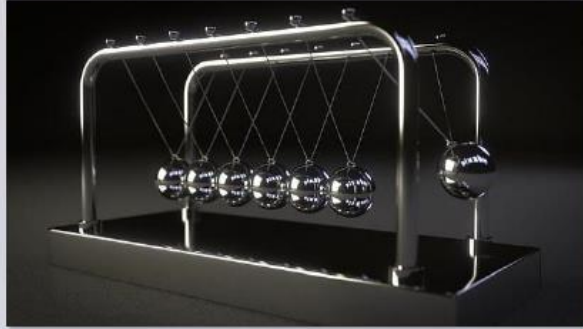
| Day | Activity | Day | Activity |
|-----|---|-----|--|
| 1 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets | 10 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Matching activity 1 |
| 2 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Circle map 1 | 11 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Matching activity 2 |
| 3 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Circle map 2 | 12 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Writing prompt |
| 4 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Circle map 3 | 13 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Close worksheet 1 |
| 5 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Circle map 4 | 14 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Close worksheet 2 |
| 6 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Circle map 5 | 15 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Close worksheet 3 |
| 7 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Sorting activity 1 | 16 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Close worksheet 4 |
| 8 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Sorting activity 2 | 17 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Close worksheet 5 |
| 9 | <ul style="list-style-type: none"> • Book • Vocab cards activity • Fact sheets • Sorting activity 3 | 18 | <ul style="list-style-type: none"> • Assessment |

Day 3

| Activity | Notes | Materials |
|--|--|--|
| Read or listen to a recording of the book (15 minutes) | <ul style="list-style-type: none"> • Read through the story, asking lots of questions <ul style="list-style-type: none"> ◦ Therefore it usually takes me a little longer to read each day. I can ask more questions as they get more familiar with the material. ◦ You don't want to ask so many questions you lose the flow of the story, but enough to make sure your students are truly engaged • Continue to make connections between book and vocabulary board | <ul style="list-style-type: none"> • Book • Vocabulary board |
| Vocabulary cards I Spy Game (10 minutes) | <ul style="list-style-type: none"> • I play this game, or variations of it the first few days <ul style="list-style-type: none"> ◦ Determine how many cards your students can handle in front of them. This can vary, some students may be able to have all the cards, so may only be able to handle a field of 3-5 | <ul style="list-style-type: none"> • Vocabulary cards (student set and teacher set) |
| Fact Sheets (5 minutes) | <ul style="list-style-type: none"> • Students will review the fact that will go with the circle map you are doing next as well as the one done yesterday (you will be reviewed yesterday's circle map from yesterday prior to starting next one) • Make connections <ul style="list-style-type: none"> ◦ To the book ◦ To the vocabulary board | <ul style="list-style-type: none"> • Facts sheets |
| Circle map #1 review (5 minutes) | <ul style="list-style-type: none"> • Review the circle map completed yesterday | <ul style="list-style-type: none"> • Circle map completed yesterday |
| Circle map #2 (10 minutes) | <ul style="list-style-type: none"> • Choose the one of the circle maps that matches the fact sheet you reviewed above <ul style="list-style-type: none"> ◦ Choose either the errorless version OR the one with wrong answers mixed in • Make connections to the book and fact sheet as necessary | <ul style="list-style-type: none"> • Circle map • Scissors • Glue |

- Galileo
- Newton
- Darwin
- Curie
- Einstein

From a very young age, Galileo was interested in figuring out how and why things moved the way they did.



76 page book

One of his most famous experiments was dropping 2 objects from the top of the Leaning Tower of Pisa.



It was when an apple fell on his head that Newton had the first idea there was a **force** that was pulling things down to the Earth's surface.



Charles Darwin grew up in England and spent many years traveling around the Eastern hemisphere on a ship called the H.M.S Beagle.



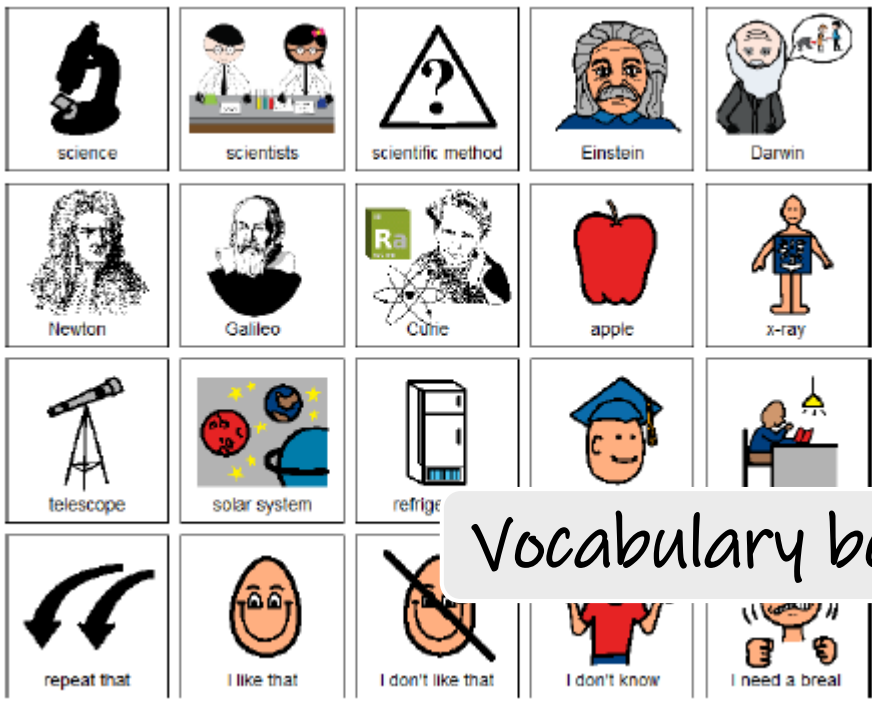
Christa Joy, Special Needs for Special Kids

She used what she had learned to make portable x-ray machines that would travel from battle sight to battle sight, x-raying and helping wounded soldiers.



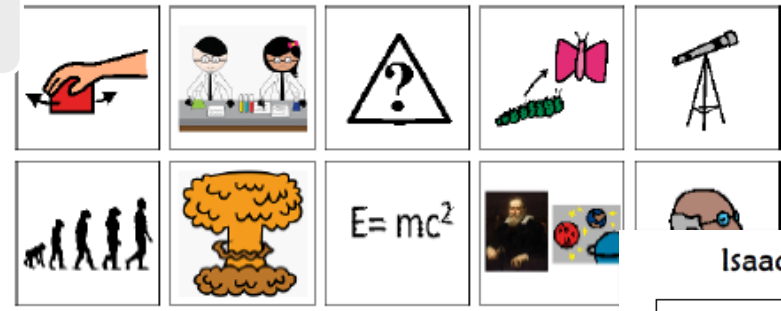
Along with a partner, Einstein, developed the technology to build the first refrigerator. It changed forever how people gathered, stored, and prepared their food.





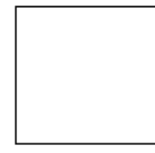
Cut & paste

Vocabulary board



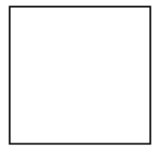
Scientific method

6 step method of investigating the answer to a question.



scientist

Person who looks to answer a question about something they can observe using a specific method.

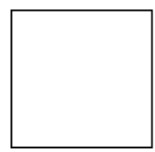


Galileo Galilei

His research and improvement on the telescope helped prove the sun, not the universe.

telescope

Tool used with special lenses to see into outer space.



adapt

To change in a way so you are more likely to live longer.



species

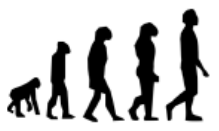
A type or family of animals or plants.



20 vocab cards

evolution

The belief that we all come from a common ancestor and have changed over time.



ancestor

Someone you are related to who is older than you are.



He changed how we thought about energy and his research was used to develop the atomic bomb.

To change in a way so you are more likely to live longer.

Probably the most of all time who taught how things move.

Nuclear weapons World War II

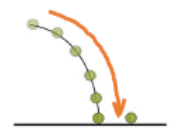
Isaac Newton



force



gravity



Charles Darwin



Newton

3 sorting activities

5 Circle maps

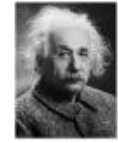


| | | | | |
|------------------|--------------------|--------------------|-------------------|----------------------------|
| farm | apple fell on head | refrigerator | how things moved | 3 Laws of Motion |
| fireplace | weight lifter | things keep moving | opposite reaction | effect of mass |
| how planets move | greatest | gravity | mailman | jeep |

| | | | | |
|------------------|--------------------|--------------------|-------------------|----------------------------|
| farm | apple fell on head | gravity | how things moved | 3 Laws of Motion |
| how planets move | greatest | things keep moving | opposite reaction | effect of mass |



Galileo

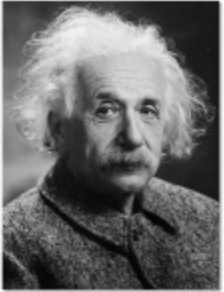


Einstein






| | | | | |
|-----------------------|------------------|---------------------------|-----------------|--------------|
| Theory of Relativity | atomic bomb | telescope | studied planets | studied mass |
| studied energy | light | sun center of universe | refrigerator | Nobel Prize |
| came to United States | Dad was musician | dropped things from tower | studied Newton | |

Errorless version

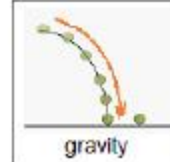
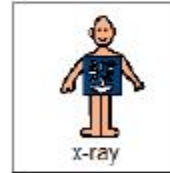
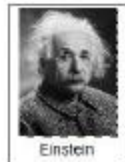
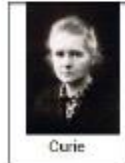
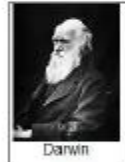
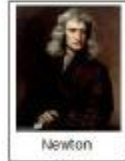
5 Fact Sheets



Albert Einstein
1879-1955

-  He came to the US to escape the Nazis in Germany.
-  He came up with the Theory of Relativity.
-  His research was used to create the atomic bomb.
-  He discovered light was made of particles.
-  He helped invent the first refrigerator.

Draw a line to match



Matching

Writing Prompt

Hello, my name is

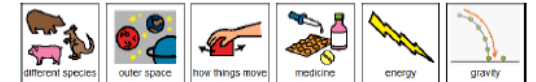


I love to study about

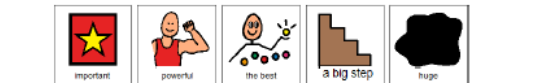
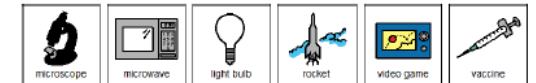
My research led to the first



My research changes



It was



5 Close worksheets

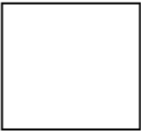
Charles Darwin





1. Darwin spent many years traveling on the HMS Beagle.


a



2. Darwin studied many different  of plants and animals.

3. Darwin believed we all come from a common .

4. Darwin was able to show that only the  survive through a process of natural selection.

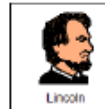
5. Darwin developed the Theory of .

Darwin

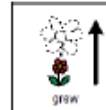
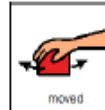
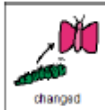


Assessments

1. He is considered the most important scientists of all time:



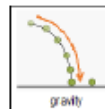
2. Galileo, Newton and Einstein all studied how things:



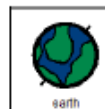
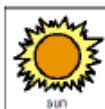
3. Both Marie Curie and Einstein won this for their work in physics.



4. Newton became interested in studying this when an apple fell on his head.



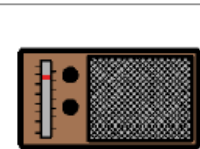
5. Galileo worked on improving the telescope and was a prove this was the center of our solar system.



Q.7



video camera

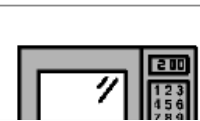


radio



x-ray

Q.8



oven

7. Marie Curie worked in World War 1 using a portable:

- A. Video camera
- B. Radio
- C. X-ray

8. This invention by Einstein changed how people stored their food forever.

- A. Refrigerator
- B. Microwave
- C. Oven

9. Newton proved for every action there is an equal and:

- A. Bounce
- B. Opposite reaction
- C. Hop

10. True or False. These 5 scientists discovered many things that improved the lives of people long ago and today.

- A. True
- B. False
- C. I don't know