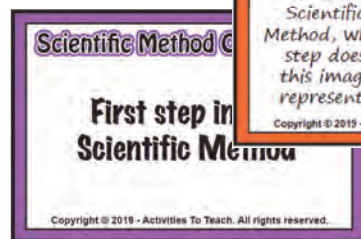
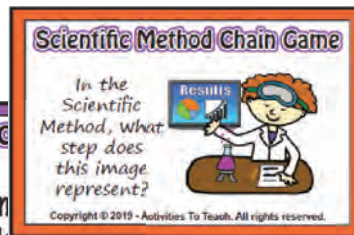
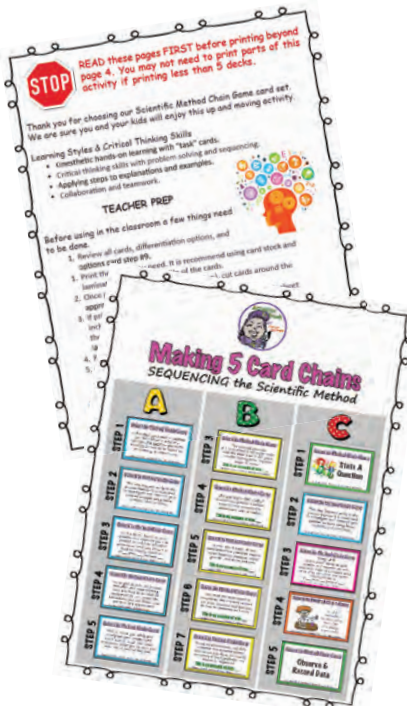


Scientific Method Chain Game

by Activities To Teach

Our Scientific Method Chain Game is designed to engage students through active learning and team work.

This Scientific Method Card Game is designed for

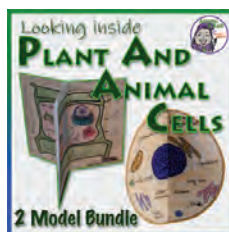


Activity includes:

- Teacher guide for prep
- Guide on how to play different
- Answers keys for "what makes a chain"
- 32 to 45 Cards in a Deck
- Deafferentation cards
- Optional 9th Step cards.
- Card sheets for making multiple decks.

Once you have played our Scientific Method Chain Game with your students, we kindly ask for your feedback and rating on our Teachers Pay Teachers site at <http://www.teacherspayteachers.com/Store/Activities-To-Teach>. Providing feedback helps us grow and improve and earns you TpT credits.

Check out some of other Science Worksheets & Packets:



3D Model Makers



Science Topic Bingos



Science Vocabulary Units



Unit - Inside the Earth



READ these pages FIRST before printing beyond page 5. You may not need to print some parts of this activity if printing less than 4 decks.

Thank you for choosing our Scientific Method Chain Game card set. We are sure you and your kids will enjoy this up and moving activity.

Learning Styles & Critical Thinking Skills

- Kinesthetic hands-on learning with “task” cards.
- Critical thinking skills with problem solving and sequencing.
- Applying steps to explanations and examples.
- Collaboration and teamwork.

TEACHER PREP

Before using in the classroom a few things need to be done.

1. Review all cards, differentiation options, and options card step #9.
1. Print the Cards you need. It is recommend using card stock and lamination to extend the life of the cards.
2. Once printed and laminated (if chosen), cut cards around the appropriate boards.
3. If printing multiple decks, using the ready to print labels sheet included (for Avery 5260 sheets) will help. Putting sticker on the back and filling in blank with Set & Card number BEFORE laminating is best.
4. Recommend using ziplock bags to organize multiple decks.
5. Alternative the plastic crayon boxes sold at Walmart works great to store these cards.



Be Kind to the environment
Think BEFORE you print and TOSS!

PLAYING at DESKS or TABLES

Cards can be used to:

- Making chains (sequences) of cards (3 to 6 cards make a chain).
 - See the following “chain answer pages” for clarification of which cards make a chain.
- Matching cards:
 - Sci Method Step Titles (green cards) with Explanations of the Step / Definitions (blue OR pink cards)
 - Sci Method Step Titles (green cards) with Examples of the step (yellow cards)
 - Sci Method Step Titles (green cards) with Picture cards (orange cards)

UP and MOVING ways to PLAY My favorite way to use the cards.

ROOM PREP: I prepare the room to have all the chairs stacked out of the way. Sometime I even move the desks up again the walls so the room is big and open.

CARD PREP: I have to decide which cards I want to use and have them organized in different stacks. For example, if I have 32 kids in a class and I want to make them to make 4 card chains, then I have to enough cards to make 8 chains (8 copies of each card in a 4 card chain). But if I want them making large 9 step chains, then I only need 4 decks of 9 cards each.

Extra Students - Late Arrivers: When numbers don't work out smoothly for a complete set of cards. An option is to have 1 or 3 students be a “check-in station” where the chain or pair goes to see if they are right. In this case I give the students a “verification” chain page.



Making CHAINS -

1. Give a different card to each student.
 - Ex: walking in the door, lining up to “pick a card”, having 3 students walk around and pass out cards.

2. Set the expectation.

- What KIND of chain do you want them to make? How many LINKS are in the chain.
- How are they to make the chain? Can they talk? Can they show their card?
- Where do they go when their chain is made?
- What order do you want the chain to be in? Number, Name, Definition, Picture, Example.
- Time limit to create the chain.

FIND your PARTNER or Trio -

1. Give a different card to each student.

- Ex: walking in the door, lining up to “pick a card”, having 3 students walk around and pass out cards, etc.



2. Set the expectation.

- Which partner are they to make
 - Title with Definition
 - Step Number with Picture
 - Title with Example and Definition

What cards make a “correct chain”?

Following these instruction pages, are series of “answer keys” as to what would constitute as a chain, pair, or trio.



How much class time will these activity take?



You can “play” this active game for 10 minutes or a full 45 to 60 minutes class. I don’t think it could stretch to a 90 minute block without students getting “bored” or “goofing off”. However if you have prizes, rewards, or points to award for “speed” or “accuracy” it could keep their attention longer than 45 to 60 minutes.

I typically used this activity at the start of the school year AND when we had a big design an experiment unit. At the start of the year I would do the activity up and moving. For a review or refresher I use the “at desk” format but time them.



Teacher Prep Note

The following 10 pages are provided to help with creating 1 or a few decks of cards. Each sheet by color boarder contains Steps 1 to 8 for each "chain link". Step 9 (optional for some teachers) is completely on its own page. These pages DO contain the differentiation cards (Blues vs Pink and options of picture or no picture with Purple and Green boarded cards).

If you want to make 4 or more decks of cards, it is STRONGLY recommend to use the next set of pages.

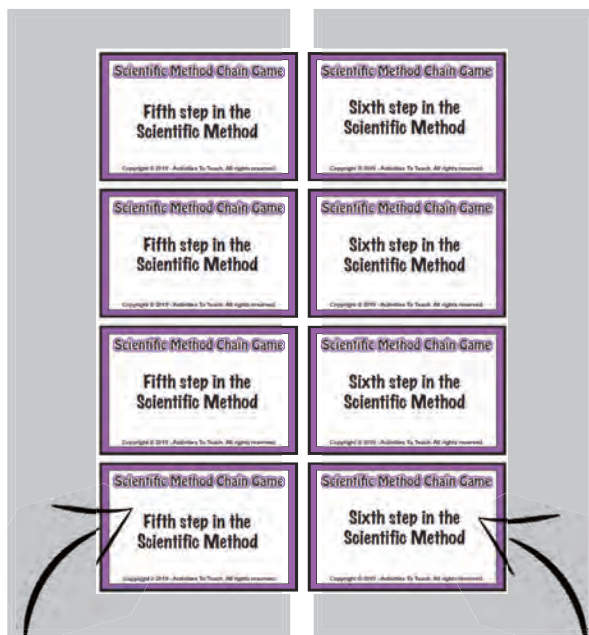




Teacher Prep Note

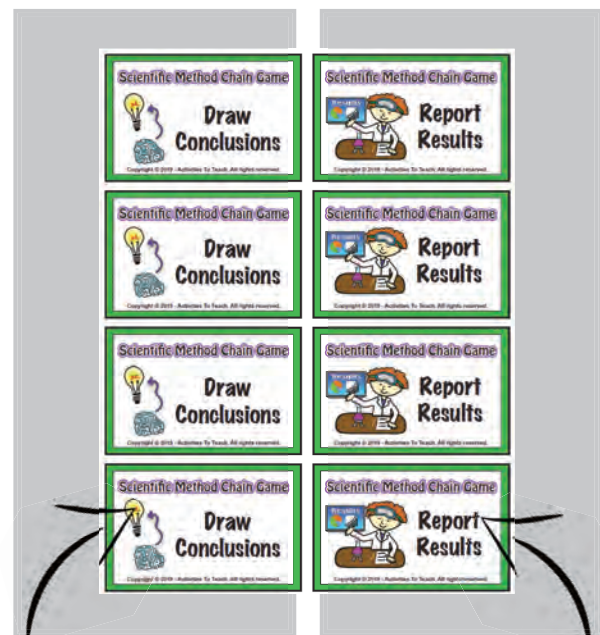
The following 36 pages are provided to help with creating 4 decks of cards in one printing. EACH page contains the SAME card 4 times (2 steps per page). These pages include the OPTIONAL cards and the DIFFERENTIATION cards (with or without pictures AND with or without the step number) too.

Do NOT Print the following pages if you only want 1 to 3 decks of the card game.



4 cards of Step 5

4 cards of Step 6



4 cards of Step 7

4 cards of Step 8

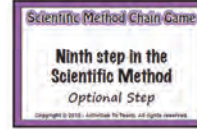
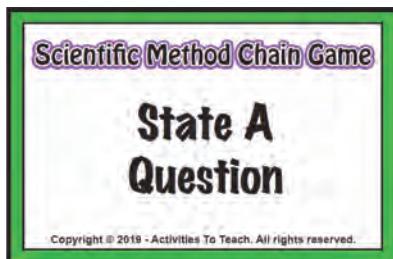
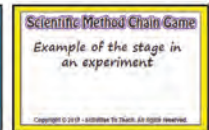
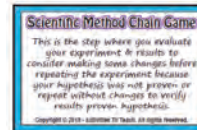
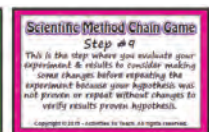
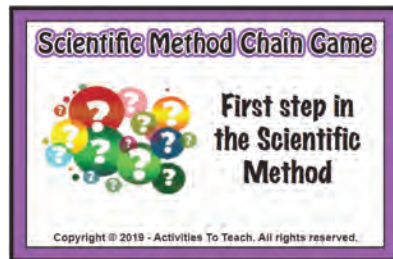
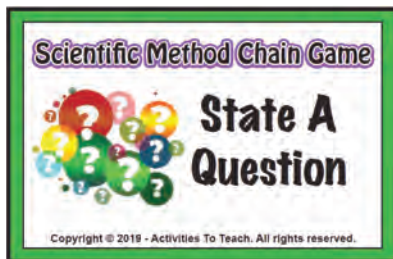


Differentiation Cards

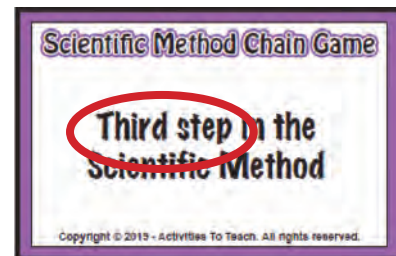
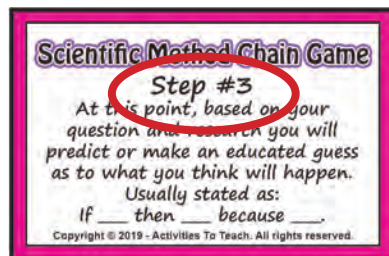
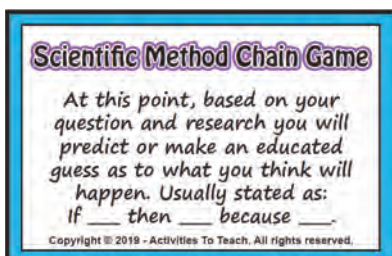
A CHAIN uses a combo of 3 to 6 cards depending on what you decide. To accommodate for language levels, learning styles, and IEP challenges, there are "options" for cards to use. Please see details below on which cards you can choose from.

With the green and purple cards you can choose to use either cards with pictures or just words.

Step 9 - Optional
Can be used as a challenge step or card.



With the Pink vs Blue Cards, the difference is the STEP # on the Pink card. If using the Pink cards, do NOT include the Purple cards.





Making Partner with Cards for the SAME STEP

Scientific Method Chain Game

First step in the Scientific Method

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A

Scientific Method Chain Game

State A Question

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Scientific Method Chain Game

State A Question

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D

Scientific Method Chain Game

Step #1

In this step you create a question you have about a subject or concept. The question you write needs to be able to be tested by performing an experiment.

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Scientific Method Chain Game

State A Question

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B

Scientific Method Chain Game

In this step you create a question you have about a subject or concept. The question you write needs to be able to be tested by performing an experiment.

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Scientific Method Chain Game

Step #1

In this step you create a question you have about a subject or concept. The question you write needs to be able to be tested by performing an experiment.

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E

Scientific Method Chain Game

In the Scientific Method, what step does this image represent?

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Scientific Method Chain Game

In this step you create a question you have about a subject or concept. The question you write needs to be able to be tested by performing an experiment.

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C

Scientific Method Chain Game

The scientist asks:
Would green beans taste sweeter if given sugar water while growing?

This is an example of step ____.

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Scientific Method Chain Game

First step in the Scientific Method

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F

Scientific Method Chain Game

The scientist asks:
Would green beans taste sweeter if given sugar water while growing?

This is an example of step ____.

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Making 8 Card Chains

SEQUENCING the Scientific Method

A

STEP 1

Scientific Method Chain Game

In this step you create a question you have about a subject or concept. The question you write needs to be able to be tested by performing an experiment.

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STEP 2

Scientific Method Chain Game

This step happens early in the process because it is important to investigate and research your question or topic using books, websites, and/or videos.

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STEP 3

Scientific Method Chain Game

At this point, based on your question and research you will predict or make an educated guess as to what you think will happen. Usually stated as: If ___ then ___ because ___.

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STEP 4

Scientific Method Chain Game

The largest step in the process and often the most exciting. Here you have to decide on equipment to use, create the procedures you will follow, and perform the experiment.

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STEP 5

Scientific Method Chain Game

This is where you safely and wisely use your senses: sight, smell, sound, touch and taste. Remember what you do NOT see, hear, etc. is part of this step.

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STEP 6

Scientific Method Chain Game

The experiment is done and you have made your observations. Now you need take some time to write down what you observed and evaluate what occurred.

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STEP 7

Scientific Method Chain Game

At this step you work to decide if your hypothesis was valid or not. You also make statements as to what happened, when and why you think things occurred.

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STEP 8

Scientific Method Chain Game

This step happens at the end and is important so that others learn what was discovered during the experiment. Usually scientists make a written report and share it. Some make oral presentations.

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B

STEP 1

Scientific Method Chain Game



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STEP 2

Scientific Method Chain Game

In the Scientific Method, what step does this image represent?



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STEP 3

Scientific Method Chain Game

Step #3
At this point, based on your question and research you will predict or make an educated guess as to what you think will happen. Usually stated as: If ___ then ___ because ___.

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STEP 4

Scientific Method Chain Game



In the Scientific Method, what step does this image represent?

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STEP 5

Scientific Method Chain Game

Across the 4 weeks of the experiment, the scientists records what happens, measures plant growth, and takes pictures.

This is an example of step ___.

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STEP 6

Scientific Method Chain Game



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STEP 7

Scientific Method Chain Game

Seventh step in the Scientific Method



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STEP 8

Scientific Method Chain Game

This step happens at the end and is important so that others learn what was discovered during the experiment. Usually scientists make a written report and share it. Some make oral presentations.

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