

Scientific Method – is it magnetic? Supplies

- paper, crayon or colored pencils
- collection of miscellaneous items – half magnetic, half not – enough for all the kids to have one plus some extras (examples: paper clip, plastic toy, small wood block, bottle cap, button, refrigerator magnet)
- One magnet wand, one other magnet that looks like a classic horseshoe magnet
- Optional: enough magnet wands for all to test, and extra items to test if there's time

Song Lyrics

What can we do with the scientific method (3x) In our laboratory.

First, we think up lots of questions (3x)... In our laboratory.

Then we observe with all our senses....

Hypothesis is our best guess...

Do experiments to test our guesses...

Record results and share with others...

Hooray, we learned something...

Talk a little about scientists – who they are, what they do. Then explain that they follow a process to learn about the world. It's called the Scientific Method, and we're going to learn it and practice it today.

Sing first verse of song: "first we think up lots of questions." Then hold up a magnet, and ask if they have any questions about magnets. Have they ever wondered how they work? Do they have questions about magnets?

Then talk about how scientists observe with all their senses – what does that mean? Sing that verse.

Give each child an item.

Then ask them all to draw a picture of their item. Talk about how scientists write things down to remember what they observed and to share those observations with others.

Explain that when we have a question, we can guess at what the answer is. The scientific word for an educated guess is hypothesis. Sing hypothesis verse.

Intro today's question – will a magnet stick to it?

Then tell them we're going to do an experiment. Sing "do an experiment" verse.

Take out one magnet wand (keep the rest hidden for now!).

Tell them we'll test each of their items. Hold up a sample item: ask them to make a hypothesis and predict whether the magnet will stick or not. Tell them to show thumbs up if they think the magnet will stick thumbs down if they don't think so.

Then test their items one at a time, and tally the results. (Note: It's hard for them to wait their turn!) Show results, and sing "record results" verse. Ask them to share something they learned about what kinds of things attract magnets and which don't Then sing "hooray we learned something" verse.

Optional Extensions

You could offer each child a magnet and a collection of miscellaneous items to test, also offer a magnetic board, or metal item to try sticking their items to – are the items themselves magnetic?

A book about the scientific method, such as [Scientists Ask Questions](#) by Garrett