

How Research Works

Think of an Idea	Hmmmm....The cookies tasted different this time.
Research	I think how long they were in the fridge made a difference.
Make a Prediction	If I keep the dough in the fridge before baking the cookies, they will taste better.
Test your idea!	I will use the same dough, but I will bake some right now, some in 12 hours, and some in 2 days.
Collect and review information	I will ask people I know to taste test the cookies and rate them.
Share information	I will share with everyone I know how to make the best cookies!

How Research Works: Our Experiment

Have an idea!	
Do some research about the idea.	
Make a prediction.	
Test your idea!	
Collect and review information	
Share information	

🔍 Think about something in your own life you are curious about. Fill out the two charts about what you would study.

How Research Works

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Qualitative and Quantitative Research

Directions *(to be talked about):*

In qualitative research, researchers observe people's daily lives. They interview people. They find patterns in what people do and what they think.

In quantitative research, researchers use tools to measure what they study.

Read the descriptions of different kinds of research. Place each description in the right category.

For the Instructor: Print the chart and cards. Cut the paper up into cards. Students will place the cards in the right category after talking about it with a partner.

Directions to tell students: *Decide if each card belongs in the qualitative or quantitative column.*

Qualitative	Quantitative

Directions to tell students: *Decide if each card belongs in the qualitative or quantitative column.*

Watching pre-schoolers to see what toys they use the most after watching a movie about science

Measuring blood pressure levels of participants before and after a six-month Zumba class

Talking to a group of people about a new health clinic

Testing people about what they know before and after a class on diabetes

Interviewing people who were arrested many times for drinking alcohol and driving

Comparing the height of children with a certain gene to children without the gene

Learning from people over 100 years old about what they do to stay healthy

Measuring how much lead is in the water and how much disease is in a town

Instructor Directions:

Provide each pair with a set of the three different cards. They will match the term, image, and definition for each measuring tool.

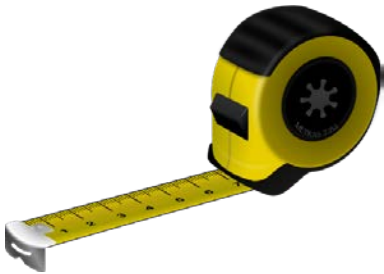
Alternates: Give everyone a card and have them find their matches. Or have them put them in order on the board on a paper.

Extension:

If a pair finishes while others are still working, ask them to think about other tools they use to measure things in their own lives.

What do they measure with those tools?

They can use blank cards to draw a picture, write the word, and describe what the tool measures, if they want.



Paper forms	Scale
Measuring tape	Sphygmomanometer (Blood Pressure Cuff)
Needle (Blood Draw)	Lab work
Timer	

Shows information about Shows how much

what people know,
personal information, or
how people act

people weigh

Shows how tall someone
is or their waist size

Shows blood pressure

Shows how much blood
is being drawn from a
person

Shows how long it takes
to walk or how many
heartbeats in an amount
of time

Shows how much
cholesterol is in blood,
the levels of blood sugar,
or other medical
information