

Activities

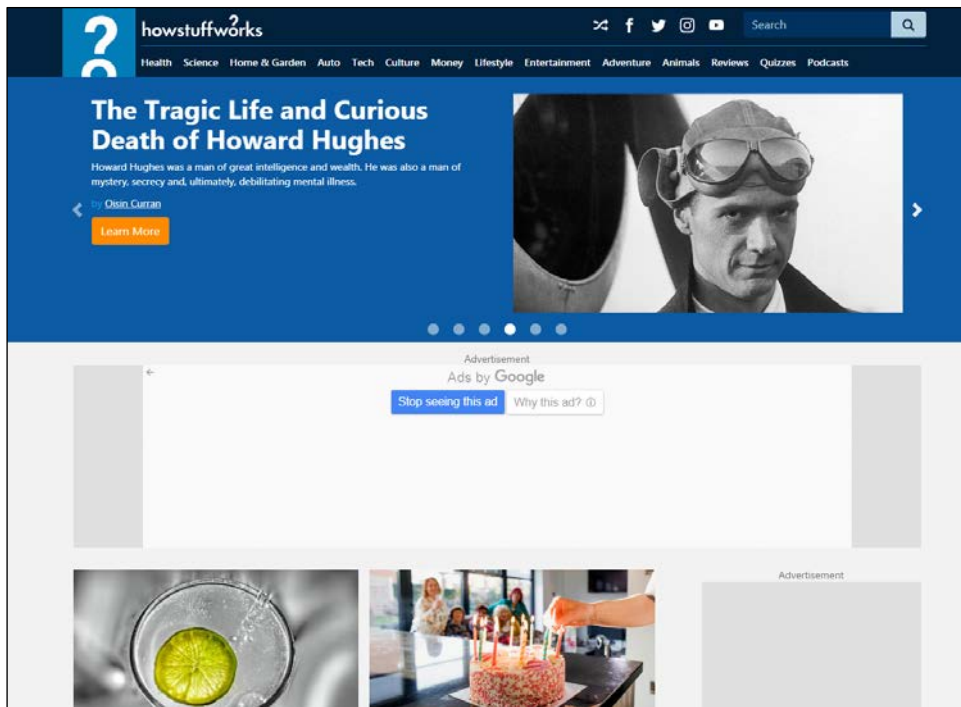
Topic: Free

Use Google Translate in case you don't understand something.

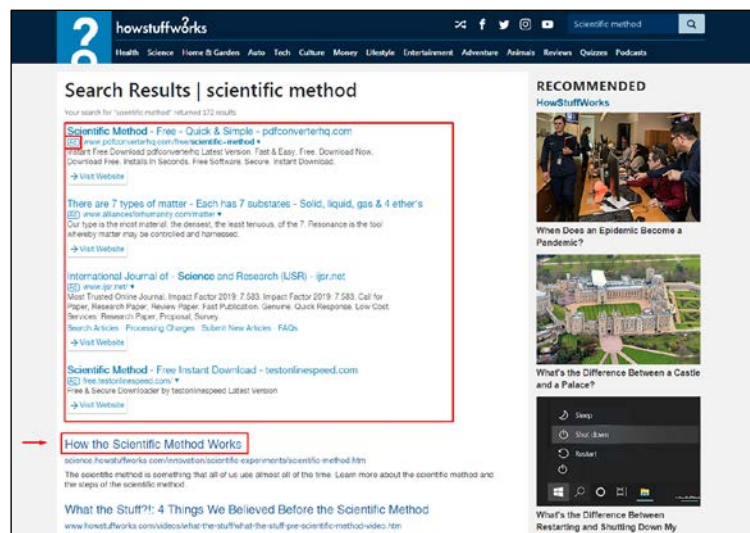
1. The Scientific Method

Instructions:

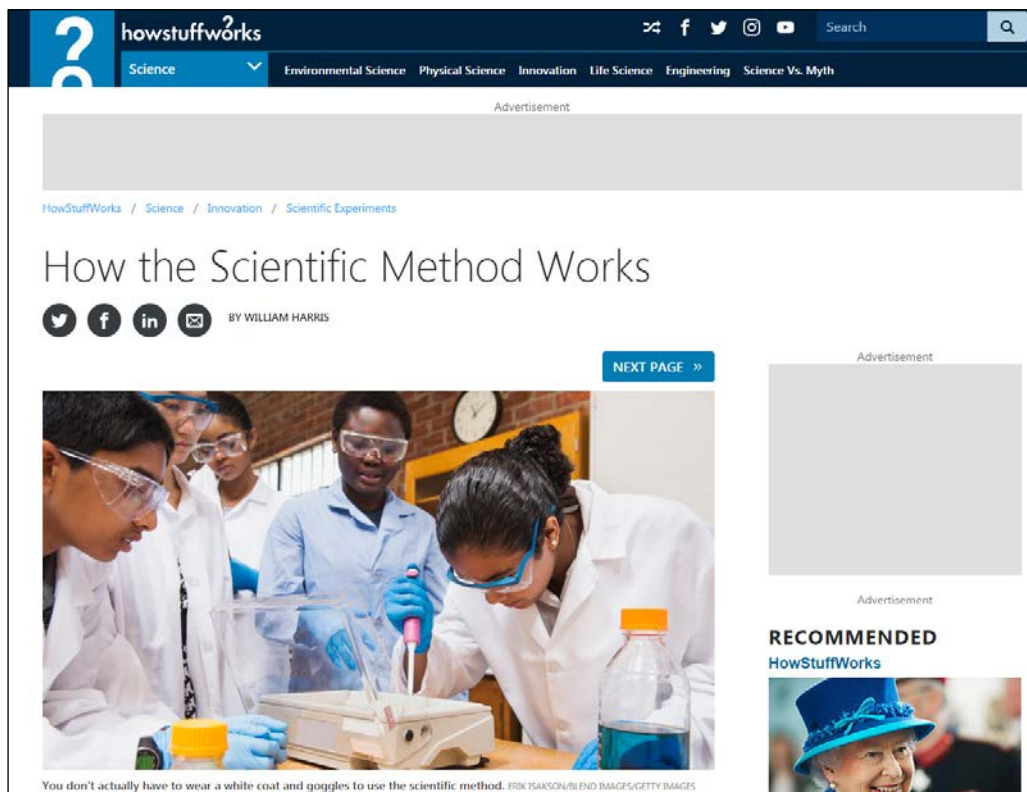
Go to the How Stuff Works website using the link. (<https://www.howstuffworks.com/>)



This is a very interesting website, with a wide range of useful information. You can search for topics of your interest using the Search Bar. For this activity, search for "Scientific method". The first results will be advertisements; click on "How the Scientific Method Works".



Although the article is eleven pages-long, **we will only work with the first three pages**, which introduce the topic and talk about the definition of scientific method.



According to the article, answer the following question.

a) Is the scientific method something exclusive for professional scientists?

The scientific method...

b) Can science be reduced to learning from textbooks and lectures?

Although it involves...

c) Should science ignore observed evidences? What are they called when they are recorded?

Science should...

d) What is the name given to numerical data? What is the name given to data about quality or behavior?

They're called, respectively,...

e) How did Edwin Hubble deduce that galaxies are moving away from each other?

He used a...

f) How do we test predictions to see if they hold true?

We use...

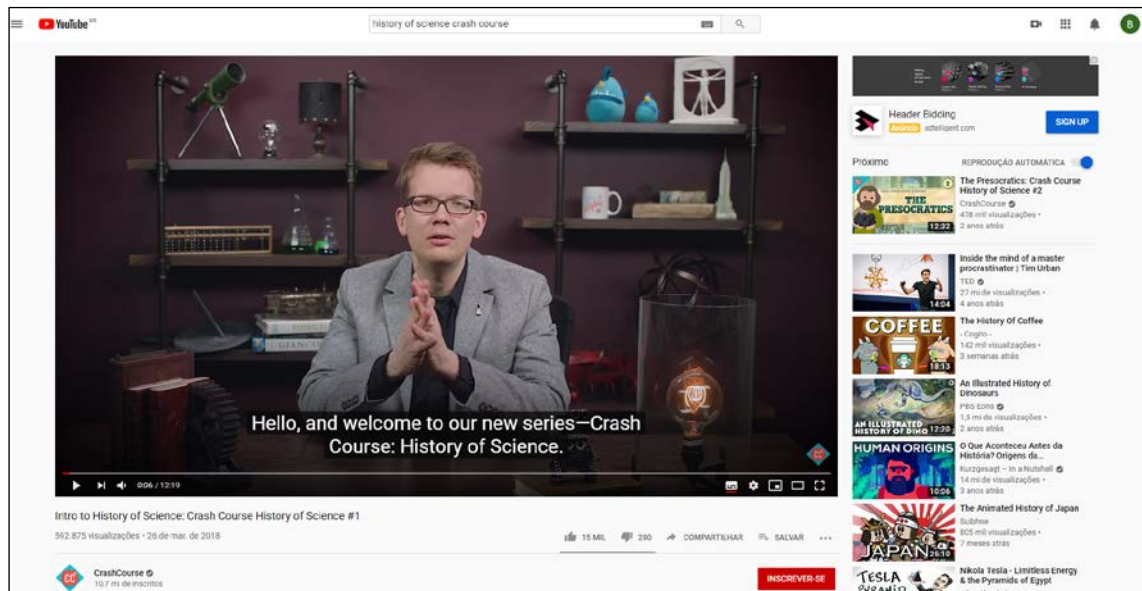
g) What three steps are fundamental for systematic science?

Scientists are required to...

2. History of Science

Instructions:

Go to the YouTube website using the link to the video “Intro do History of Science: Crash Course History of Science #1”. (<https://youtu.be/YvtCLceNf30>)



You can activate Closed Captions for this video, using the option on Detail, in the bottom right corner, and then activating them.



Watch the video, and then answer the questions.

a) “The history of science is not only a story of Humanity’s collective movement from ignorance to knowledge”. For which reasons does Hank say that?

For two different reasons...

b) What is the question that guides this episode?

“What is the history...

c) What are the two meanings for the word “science” today?

Science can mean...

d) What did he mean when he said “systematically”?

He meant that...

e) What does *Nullius in Verba* mean? What did you understand by that?

It means...

f) What are the dates of foundation of the Royal Society?

It was founded in [year] and re-founded in...

g) Why do experiments need to be reproducible?

So that...

h) When was the word “scientist” coined, and by whom?

It was coined in the...

i) Do we have a clear answer to the question “what is consciousness”?

We still...

j) What are the questions that will guide the entire series?

The questions are:...