



Definition and scale

THIS IS A TEAM TASK

Use the 18 Definition and Scale Cards and create a chart on the table like this:

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At the top of each column put the name of a measuring prefix. Below each of these, put the definition of this prefix. Below these put the visual image that you think matches this scale.

Work with your facilitator and the rest of the group to make the chart and see if you were right.



Surface area

THIS IS A TEAM TASK

Work in a group to complete the science experiment and investigate surface area.

Why do you think surface area is so important at the nanoscale?

Procedure:

1. Assemble a mixing glass, water, a stopwatch, and two kinds of sugar.
2. Fill the glass with water
3. Put one kind of sugar in the glass and stir - time how long it takes to dissolve.
4. Empty the glass and fill it with water again.
5. Put the second kind of sugar in the glass and stir - time how long it takes to dissolve. (try to stir at the same speed and strength).

Discuss what happened...





Nanoscience vs. Nanotechnology

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Use the 13 Science vs. Technology resource cards for this activity. As a group, divide them into two piles. One pile will be for the cards that describe an example of science. The other pile will be for the cards that describe an example of technology.

Remember: some of the cards might be a bit tricky! Discuss each of them with your group and facilitator before agreeing which pile they go in.

After you finish, work as a group to write one sentence definitions for nanoscience and nanotechnology.



Existing Applications

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Use the Fact vs. Fiction resource cards for this activity. Each person gets one card, and in turn reads it out loud to the rest of the group.

Each card will describe a possible application of nanotechnology. After your group member has finished reading the card, vote if the application is:

- Present: It is already been developed and is being used.
- Future: It is the beginning stages of being developed and is very likely to be used in the future.
- Fiction: Unlikely to be developed or used.





Viewpoints

THIS IS A TEAM TASK

Use the Viewpoint resource cards for this activity. As a group, look at each cards that have been taken from a number of different sources. These are public service announcements, and give a message instead of selling a product.

For each card, decide what the viewpoint of the source is, and see if you can say or write it in just one sentence.

Discuss with your group why the organisation or individual might hold this opinion. How have they arranged the public service announcement? What colours or words have they chosen to use to get their message across?

