



Sensor City

THIS IS A PAIR TASK

Use the Sensor city resource cards for this activity.

Your Challenge:

You are working with the Heads of the Sensor city Security Force. Crime is rampant throughout the city and it is up to you to help!

The Sensor city resource cards have a number of applications. Be creative and combine them in any way you can think of to come up with as many ideas for security applications as you can.

Remember to think about what is fair to the people, both innocent and guilty, that will be affected by your ideas.

Choose your favourite ideas and share them with the rest of your team.



Splash the cash

THIS IS A PAIR TASK

Use the Splash the cash worksheet for this activity.

Your challenge:

You are in charge of spending a Nanotechnology Research Budget of £300,000.00

Each of the cards has a proposal on it from an organization that wants money to do research in nanotechnology. You get to decide which proposals you will accept. How much money will you give them? Less, more, or exactly what they asked for? Which proposals will you give no money to at all?

Write down your decisions in the stars on the Splash the cash worksheet and share them with the rest of your group.





Cartoon Opinions

THIS IS A PAIR TASK

Ask HQ for the art materials you will need for this activity.

Your challenge:

Draw a series of cartoon characters and show how they might feel about nanotechnology.

Try to imagine what these characters might say:

- A doctor
- A scientist
- Someone who owns a factory
- You!

After you are finished share your cartoons with the rest of your group.



More about medicine

THIS IS A PAIR TASK

Use the More about medicine worksheet for this activity, and ask HQ for help accessing the internet.

Log on to each of the websites listed on the worksheet. Compile a list of possible health applications of nanotechnology.

Use the website to find out some more information, and discuss with your partner. On the next line write if you think the application is positive or negative. On the last line write if you think the application described is present, future or science fiction.

Choose some of the most interesting applications and share them with the rest of your group.





Nanocubes

THIS IS A PAIR TASK

Use the nanocubes worksheets for this task, and ask HQ for glue or tape and a ruler.

Construct the large cube and calculate its surface area and volume.

Construct 8 of the smaller cubes. Discuss with your facilitator and partner and see if you can determine the relationship between surface area and volume.



Manufacturing

THIS IS A PAIR TASK

Ask HQ for the materials kit you will need for this task. HQ will also give you a surprise shape that you will be constructing.

1. Use the modelling material to build up the shape to demonstrate "bottom-up" manufacturing.
2. Use the wooden stick and the soap to carve the shape and demonstrate "top-down" manufacturing.

Show the shapes to the rest of the group and teach them the manufacturing terms. Which was easier to make? Would different materials have made the exercise easier?

