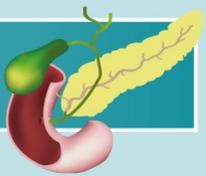


Innovate... Let's get creative!

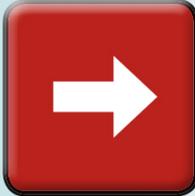


● SMSC Sp 2; ● SMSC Sp 3; ● SMSC Sp 4; ● SMSC So 1; ● SMSC So 3; ● SMSC Cd 4



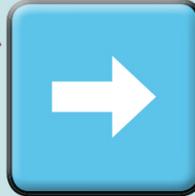
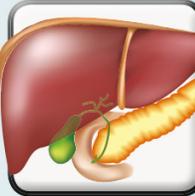
Decide how you are going to make your part of the model. What size it will be? How will you make it interactive and how will you organise the making process? Draft your ideas before getting started.

You will need to liaise with other groups to make sure the overall model works effectively. Consider entry and exit points.



What materials and resources will your group need? Make a list and decide who is responsible for gathering the different items.

Now it's getting tricky! Decide how to create the actions (processes) needed for your part of the system. Does your model need to chew, swallow, pump, churn, mix or excrete? It's your job to make it happen!



Remember to continue speaking to other groups. You will need to find ways of connecting all the parts together!



Work in your group to write a list of facts about your allocated stage of digestion. This will help you remember what your part of the model needs to do.

Divide yourselves into groups, allocating each group a stage of human digestion.



Make a flowchart to show each stage of human digestion. Be sure to get the stages in the right order – we don't want a blockage to occur!



Giganta-gut!

Can you work together to create a 'Giganta-gut'?

A large scale working model of the human digestive system that demonstrates how it works.

You will need

- Balloons
- Tubing of various size and length
- Connectors for tubing
- Plastic bags of varying size
- Sponges
- Old tights or stockings
- Pestle and mortar
- Mixing spoons
- Box of cereal (test food)
- Water
- Jug
- Bucket
- Protective aprons
- Scissors, tape.

Which group has the large intestine? How long will their part need to be?



Time for a test run. Can you pass water through your model from the mouth to the anus? Measure what you put in and what comes out! Make any necessary adjustments.



CONGRATULATIONS!
You have completed your Innovation Challenge.

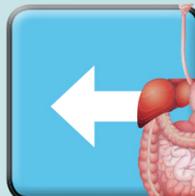
Why not invite parents and carers to watch a scientific demonstration? Be prepared to answer questions from your audience.



Is there anything you could do to improve your model? How could you make those changes?



Record your findings. What do they show? Which food successfully passed through your model? Did your model become constipated?



Now let's try digesting something solid. What could you use? Work together to suggest alternatives. Maybe you could test different meals?

