



COMICS By
Holly Dylan Josh
Matthew
Charlie ROSIE
Alex
Steven Owen

FASMed

Hello...

These comics are by Owen, Matthew, Dylan, Rosie, Holly, Charlie, Alex, Josh and Stephen at George Stephenson High School in Killingworth, Newcastle upon Tyne.

As part of the FaSMEd Project with Newcastle University, we had a new style of science and maths lessons. Then we had a weekly lunchtime comics club to make our own short comics about FaSMEd lessons.

We drew vomit comics to get our ideas out. After we decided who'd focus on which lessons, we worked through the stages of drafting, pencilling, and inking each one-page comic.

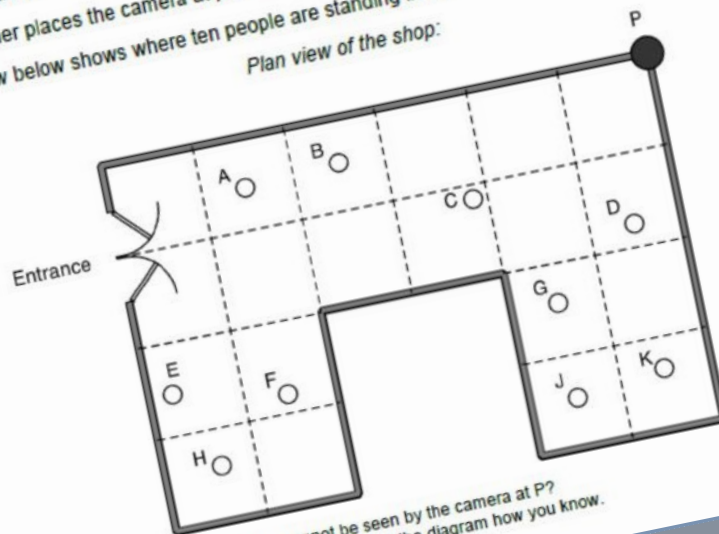
2015/16

Thank you to Miss Heslop (Teacher of Maths at GSHS), Ulrike Thomas, Lucy Tiplady, and Jill Clark from Newcastle University's Research Centre for Learning and Teaching, and Lydia Wysocki from Applied Comics Etc.

Optimizing coverage: security cameras

A shop owner wants to prevent shoplifting.
He decides to install a security camera on the ceiling of his shop.
The camera can turn right round through 360° in all directions.
The shop owner places the camera at point P, in the corner of the shop.
The plan view below shows where ten people are standing in the shop.

Plan view of the shop:



1. Which people in the shop cannot be seen by the camera at P?
Explain your answer, showing clearly on the diagram how you know.

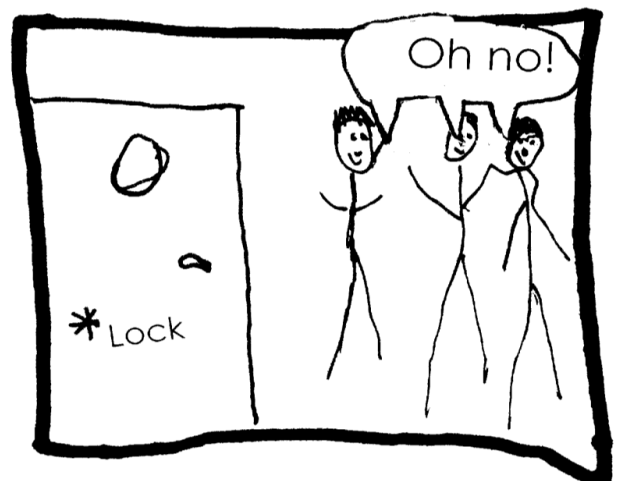
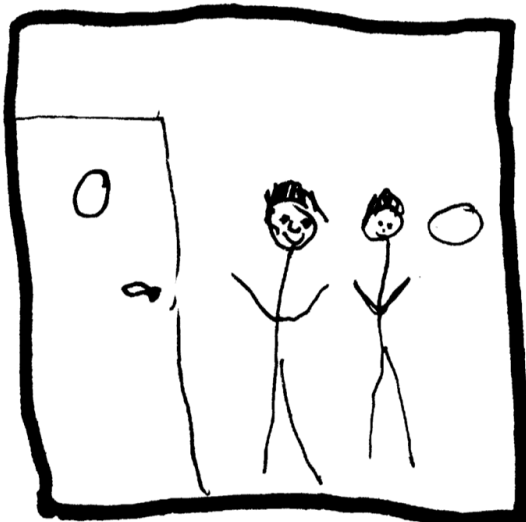
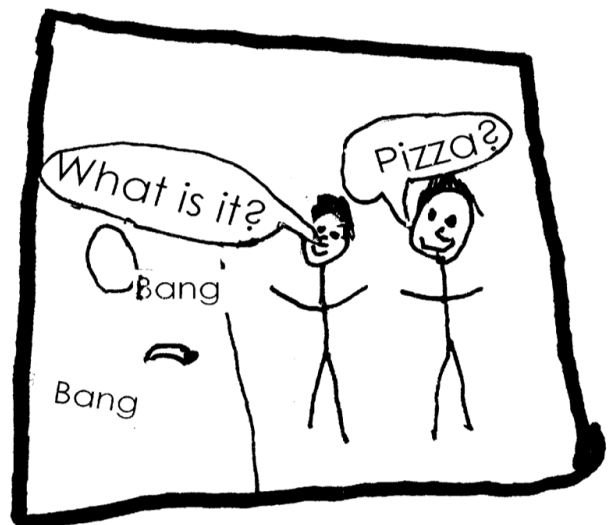
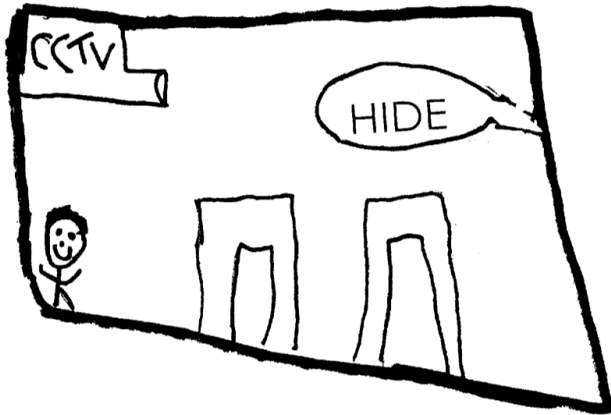


THE MATHS BEHIND
SECURITY
CAMERAS??

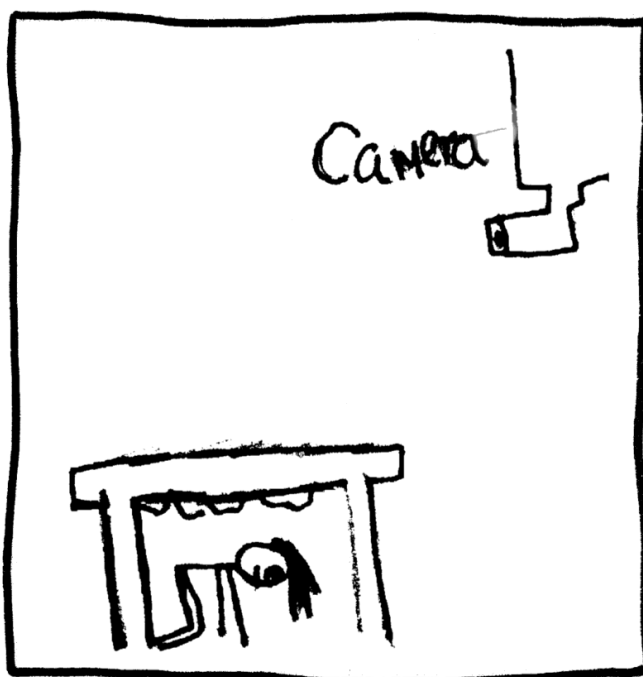
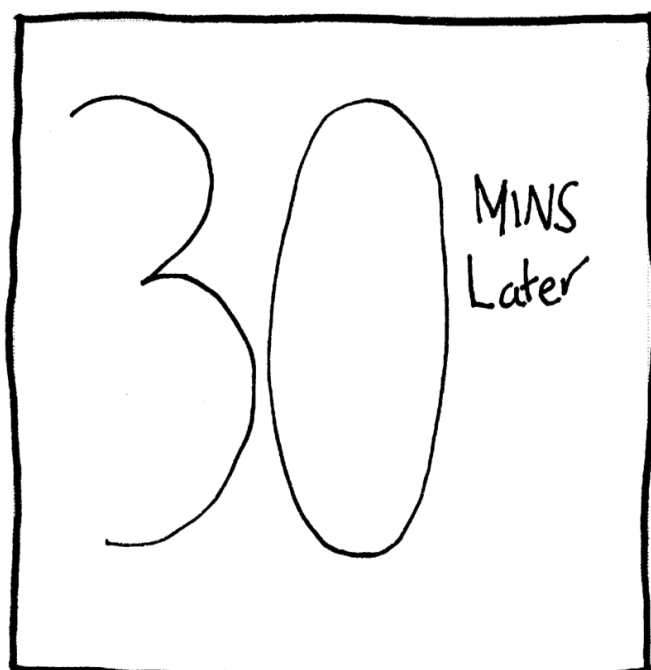
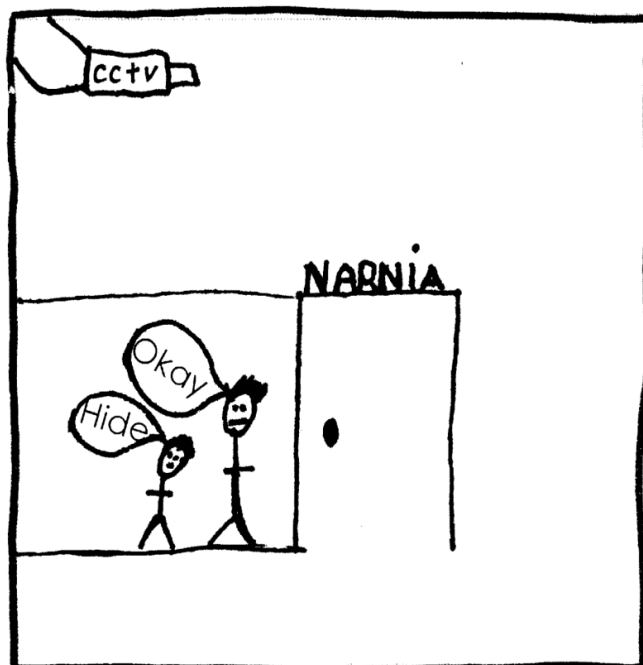
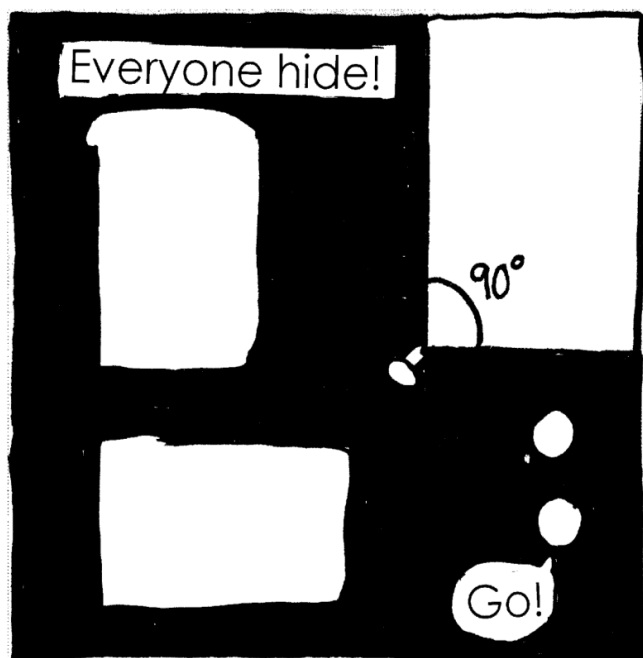


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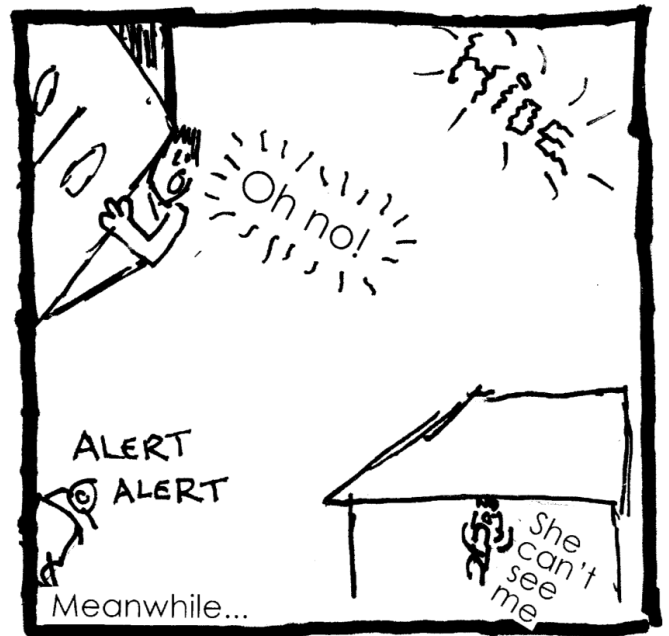
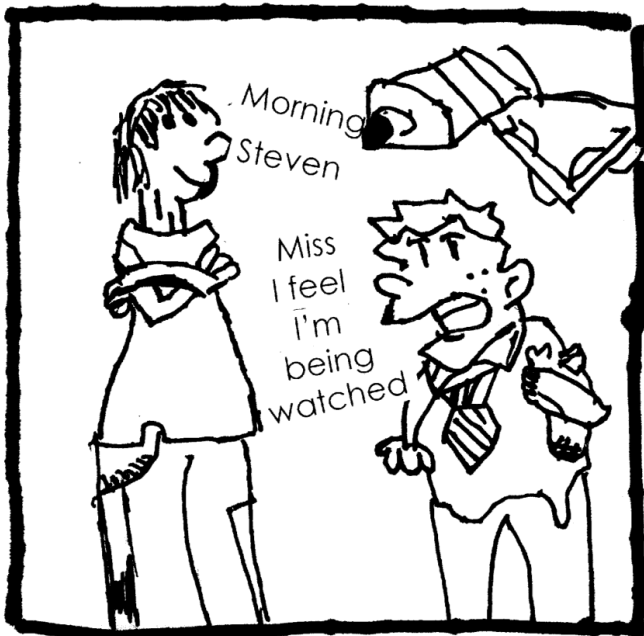
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CCTV



1 Minute later



Interpreting Distance Time graphs

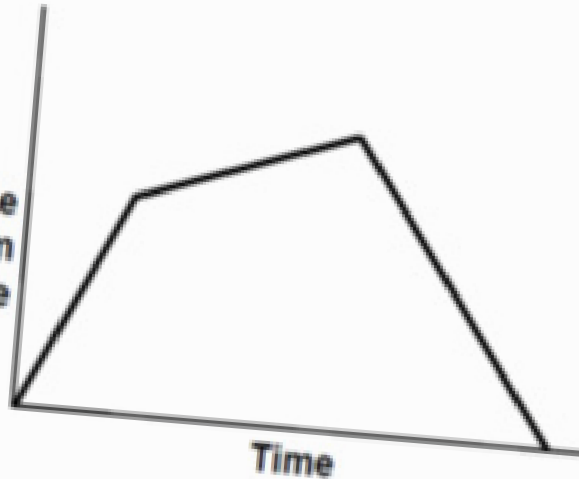
Matching a Graph to a Story

A. Tom took his dog for a walk to the park. He set off slowly and then increased his pace. At the park Tom turned around and walked slowly back home.

B. Tom rode his bike east from his home up a steep hill. After a while the slope eased off. At the top he raced down the other side.

C. Tom went for a jog. At the end of his road he bumped into a friend and his pace slowed. When Tom left his friend he walked quickly back home.

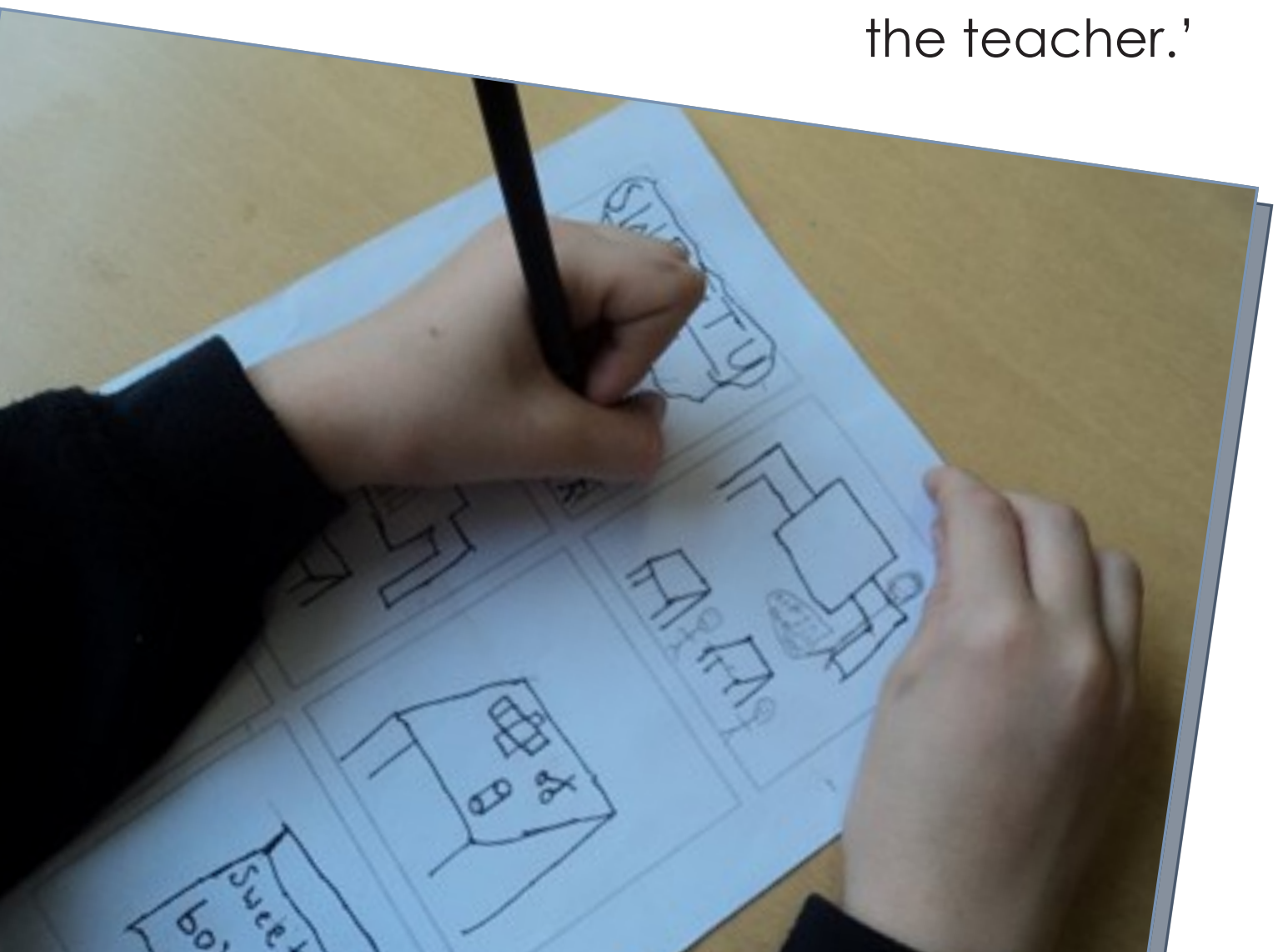
Distance
from
home

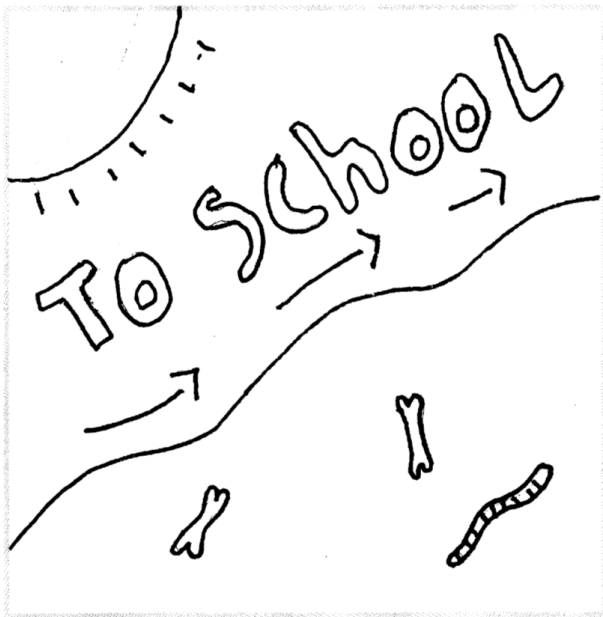


‘We were more independent.’

‘[the teacher] just told us what to do and then just let us do it.’

‘If I was stuck I would ask some of my friends first but then I would ask the teacher.’

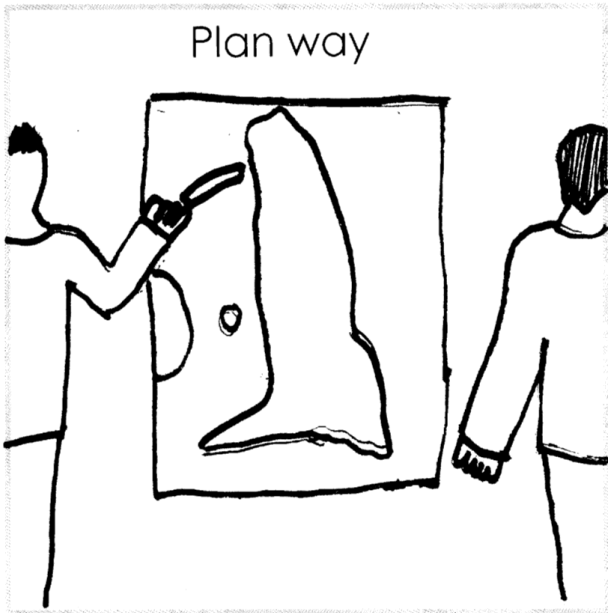




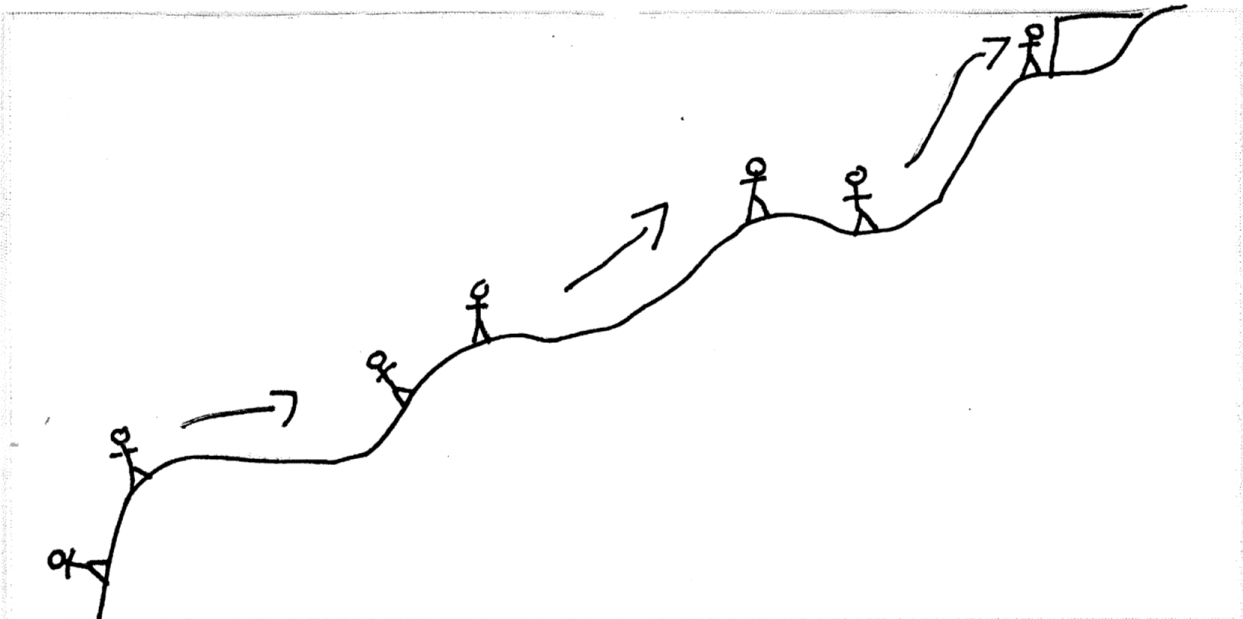
Find map



Plan way

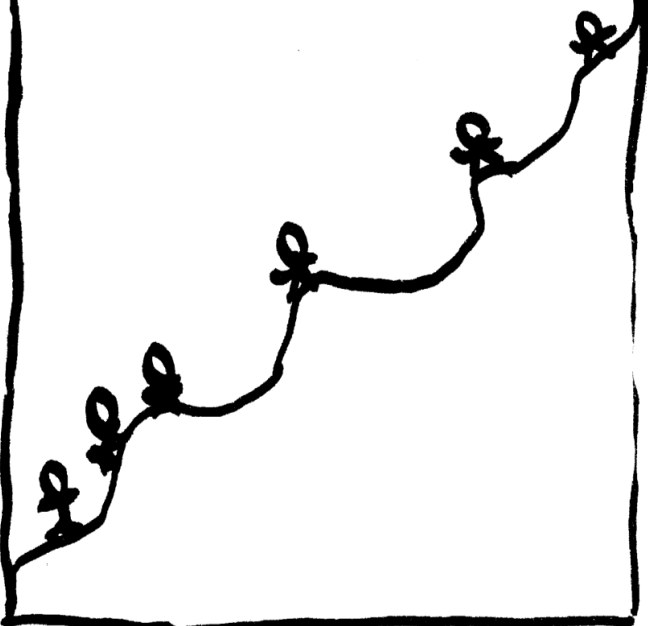
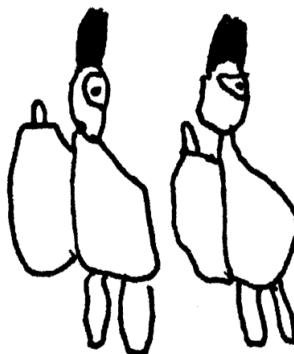
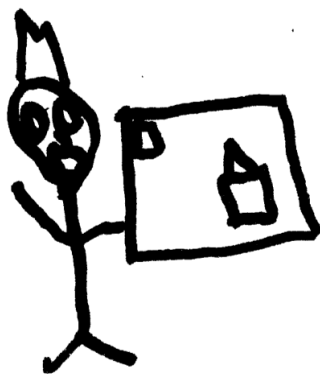
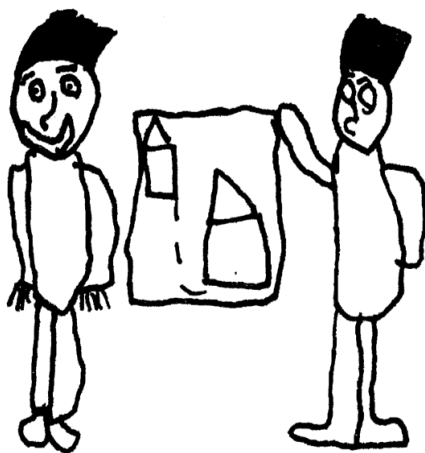
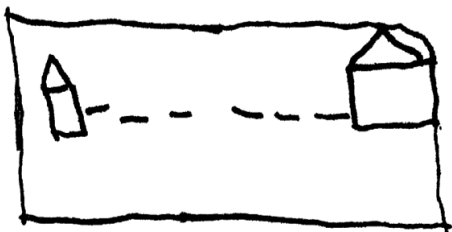


We get bags



Journey to

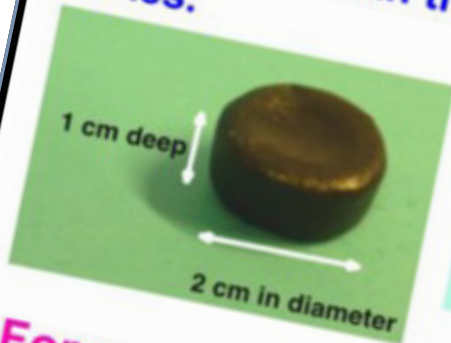
School



Design a candy carton

Your task for this lesson:

To come up with three designs for sweetie boxes.



18 sweeties

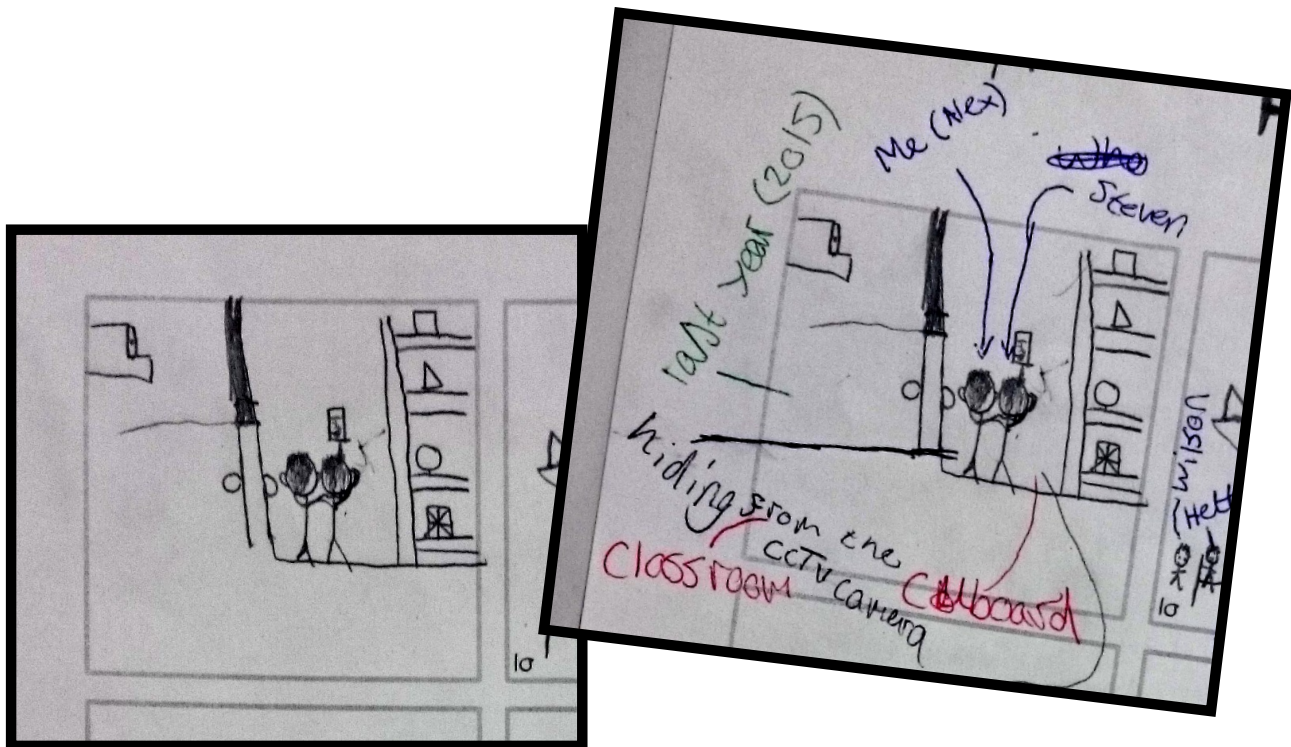
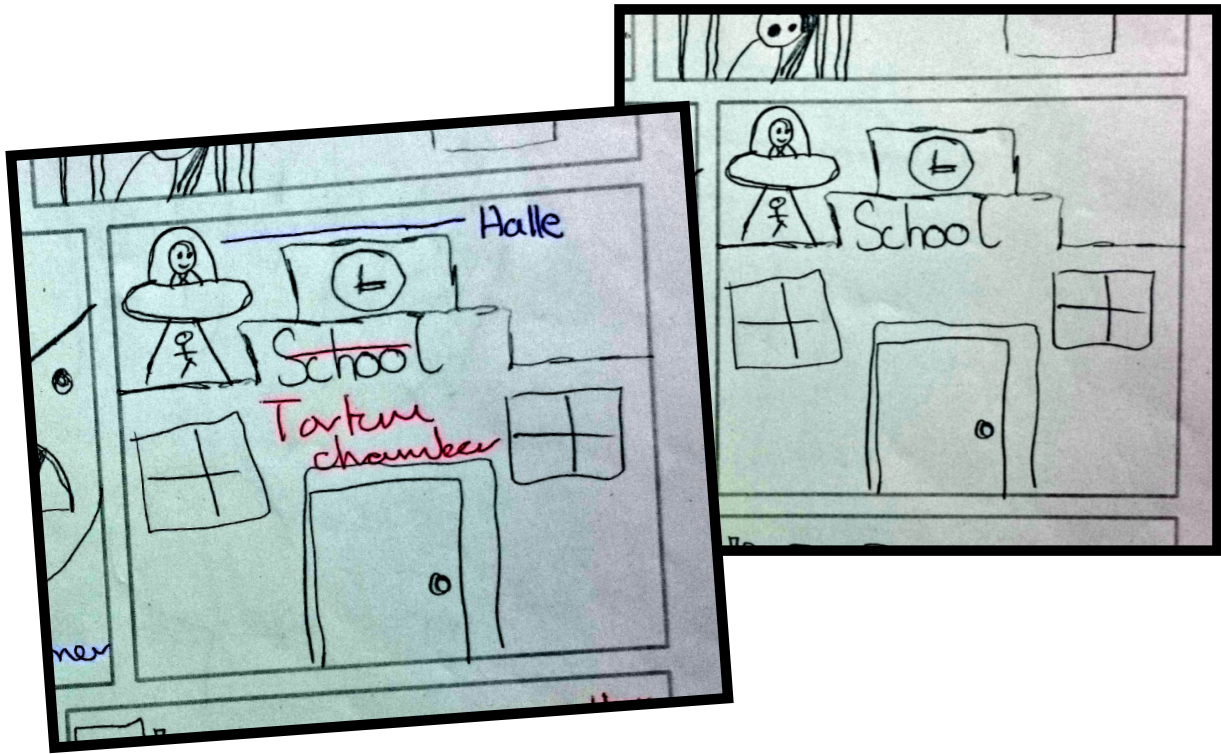
For each one come up with a strength and an improvement.

How can we make 3D shapes?

Nets look like this...



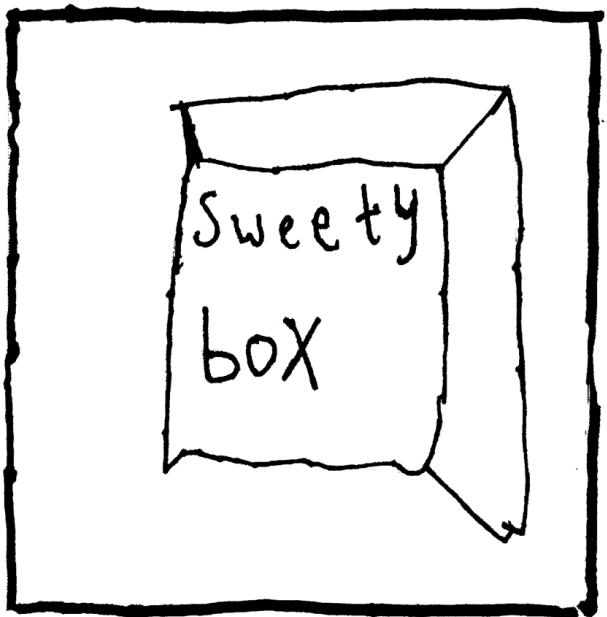
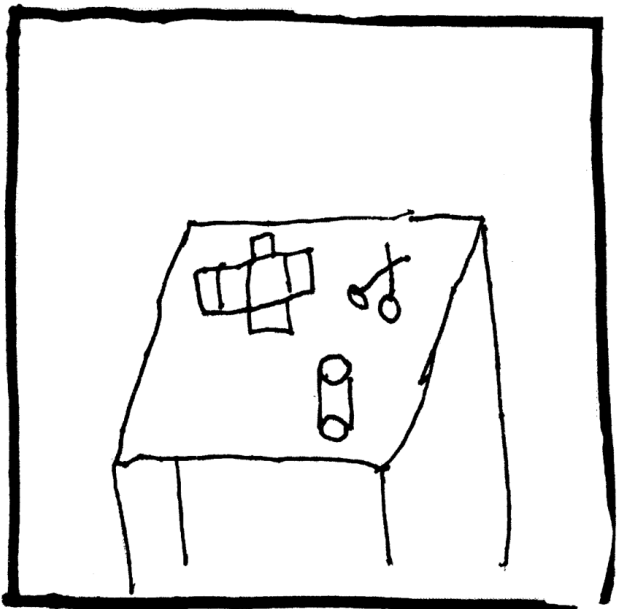
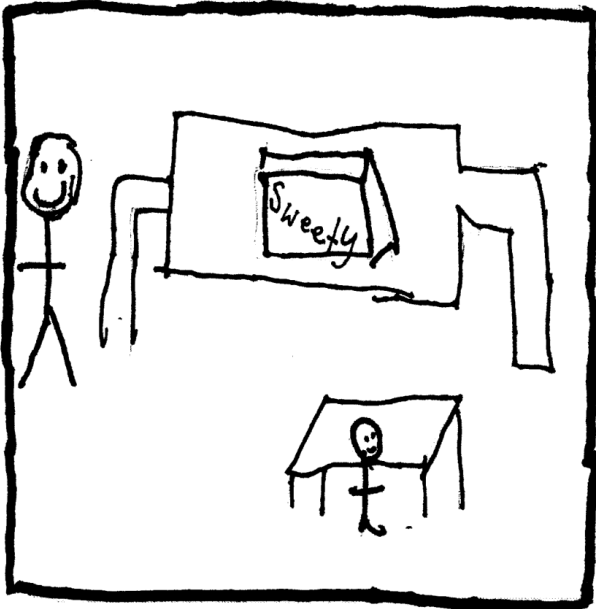
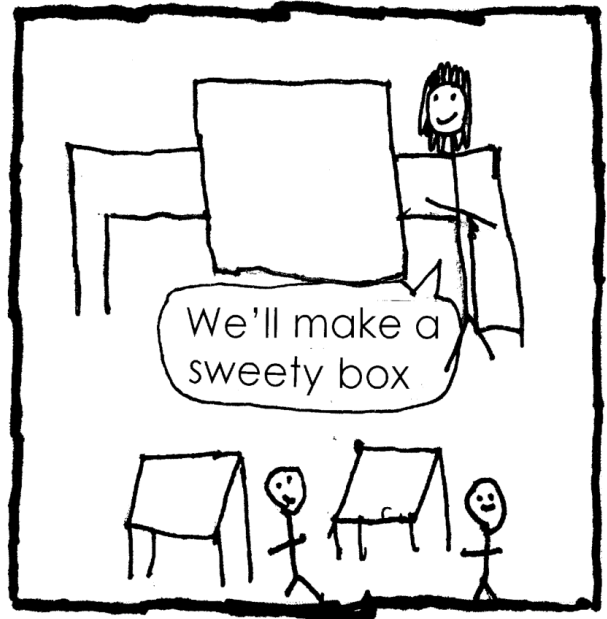
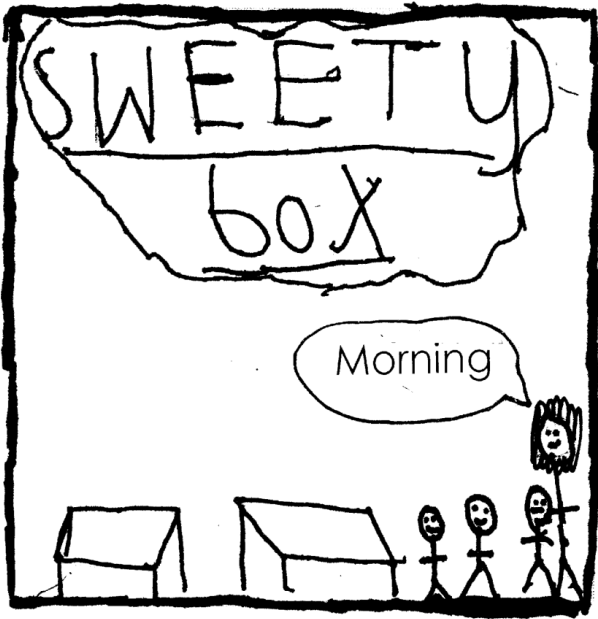
Making comics as a way to reflect on FaSMEd lessons

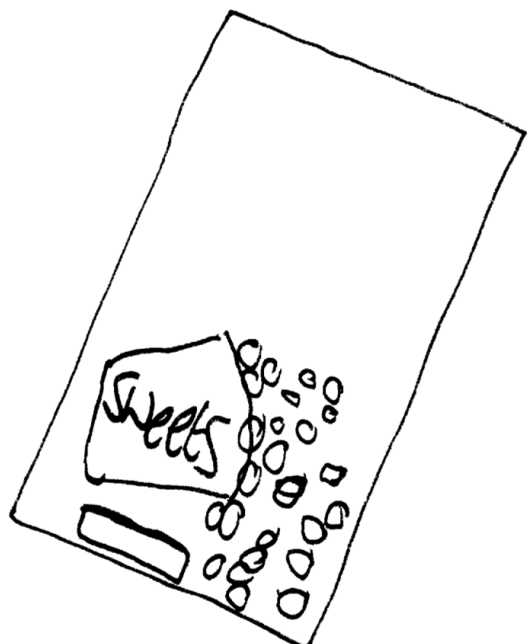
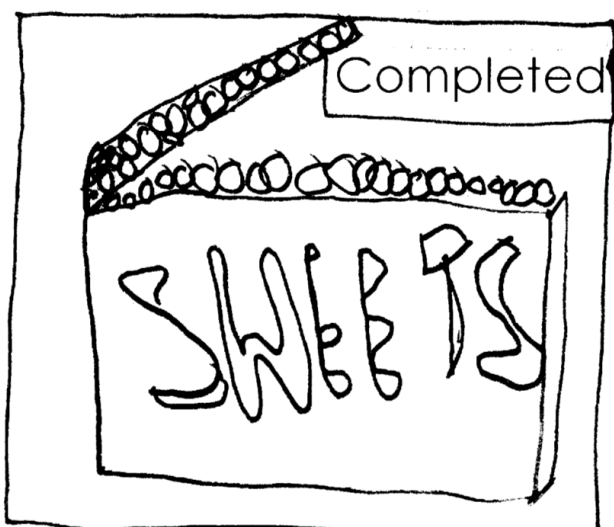
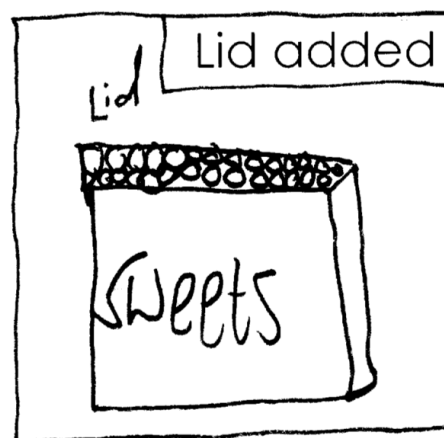
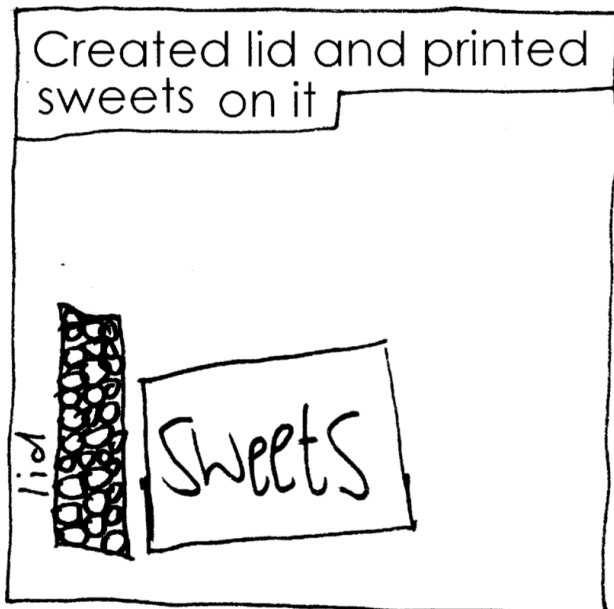
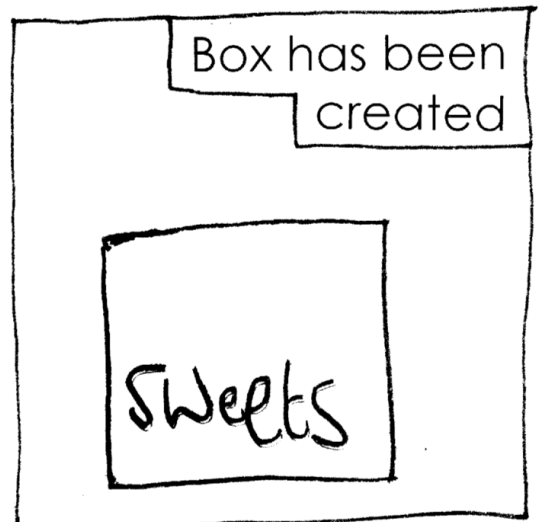
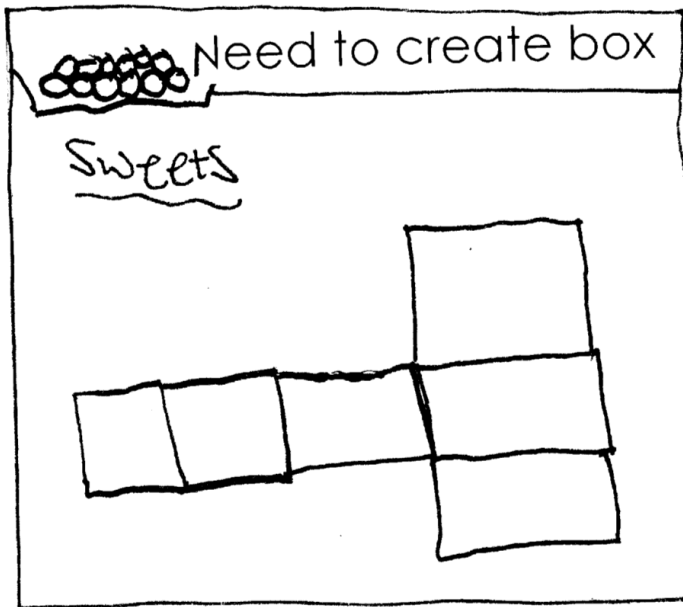


Use pencil for planning

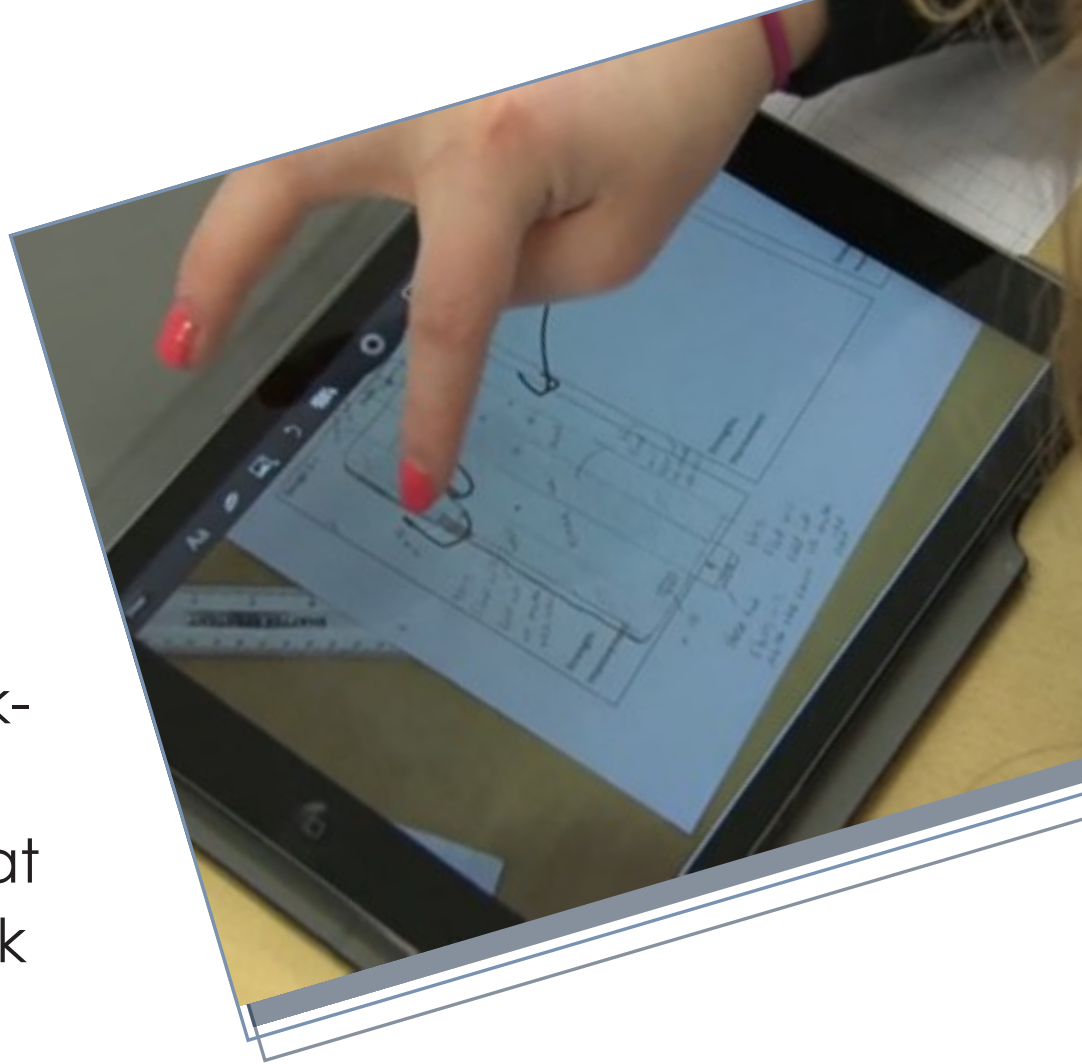
Edit to make your story clearer

Use ink for final artwork

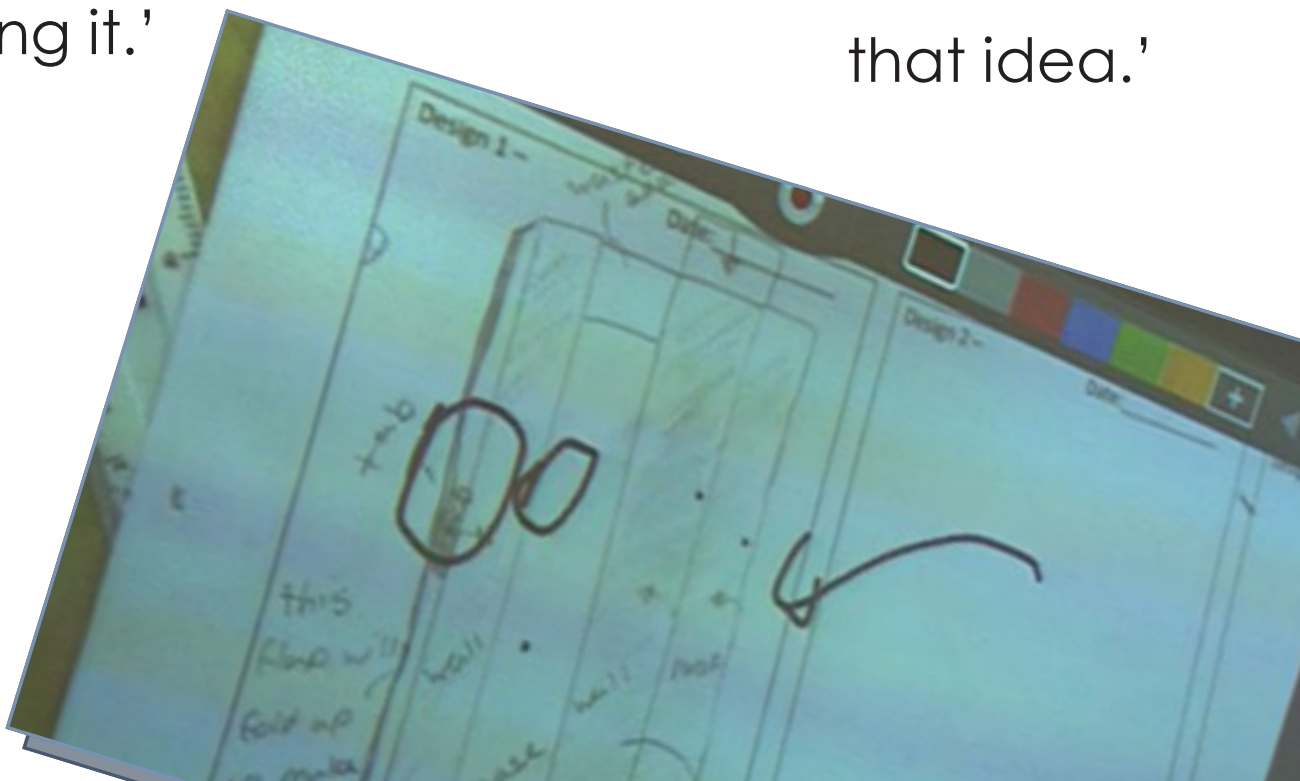




'We used ipads and it was fun. We videoed and took photos and put it on the board. Miss was walking around and looking at people's work [with the ipad]. It was connected to the interactive whiteboard and it was showing it.'

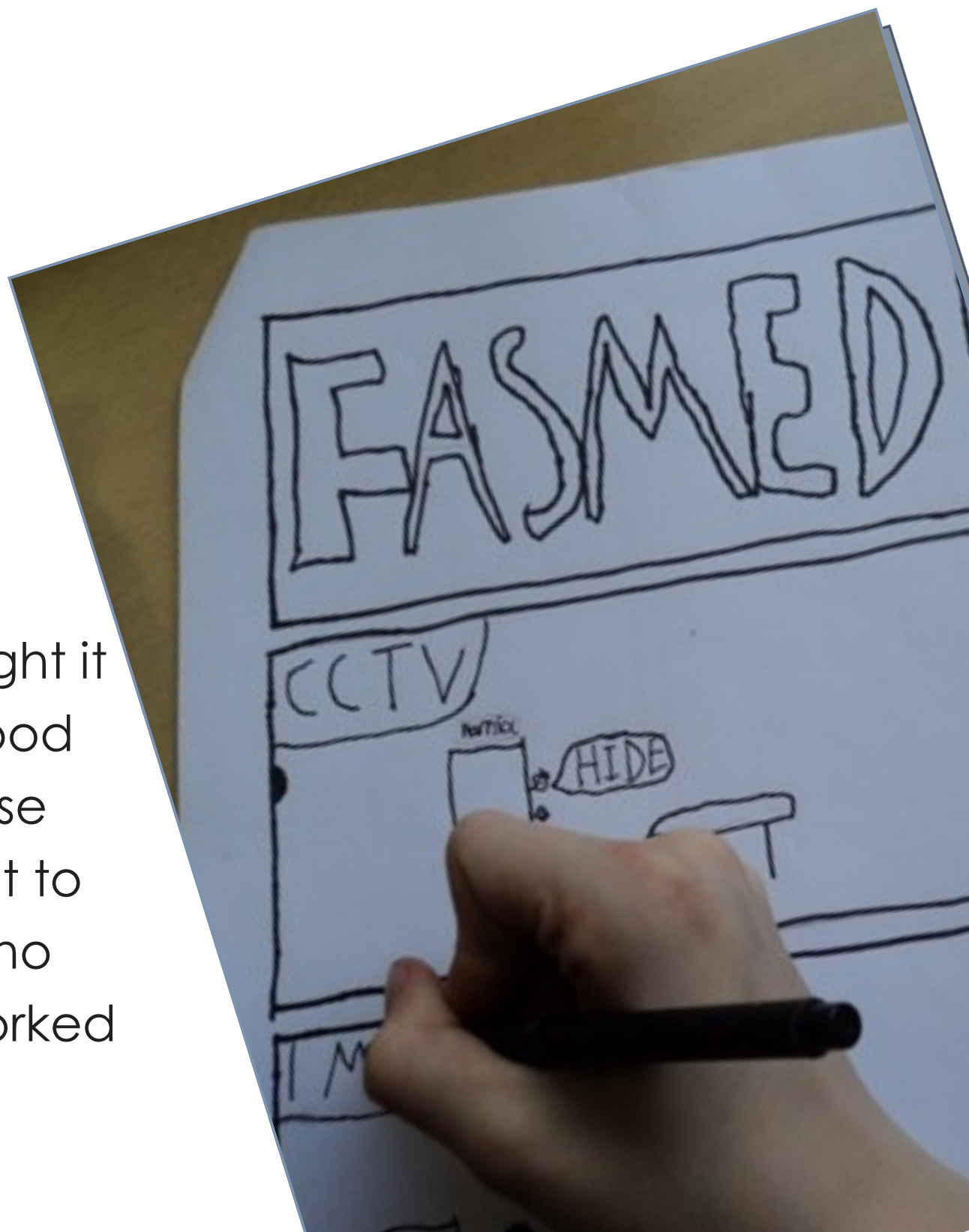


'If I didn't get an idea or I wanted another idea, miss would project somebody else's work and I would take that idea.'



‘We worked well because if you were by yourself you might struggle. If you’re with a partner and you’re stuck on something they can help you. So it’s kind of easier because if you don’t know something they might know something.’

‘I thought it was good because you got to pick who you worked with.’



Improving Progress for Lower Achievers through Formative Assessment in Science and Mathematics Education (FaSMEd)

FaSMEd is a Science in Society Collaborative Project of the European Community

This three year, €1.9M project led by Newcastle University, UK will take lessons from around the world to help improve mathematics and science skills in Europe and South Africa.

Working with partners across eight countries, researchers will look at how technology can be used in formative assessment by teachers to help raise attainment levels among the lowest achieving students.

This project has received funding from the European Union's Seventh Framework Programme under grant agreement no 612337

<https://research.ncl.ac.uk/fasmed/>

Comics about lessons
about...

... journeys to school

... hiding from a CCTV
camera

... making a sweet box.

