





Introduction to Surveying An activity Pack for Scouts





LAND SURVEYING or GEOMATICS

Ask them if they have ever heard of these words??

Break it down 'Geo' and 'Matics'??? Explain the difference





So.... what is land surveying and what do land surveyors do?











Ask the kids to shout out some ideas.
Using these photos as prompts will help them come up with some.









So.... what is land surveying and what do land surveyors do?

- Make maps
- Measure things
- Make sure things are built in the correct place
- Monitor movement, building or flood defence
- Machine control
- Calculate quantities of materials
- Cut and Fill analysis
- Athletics
- World records

Here you can make it more specific, include examples of some of the jobs you do day to day Relate it to activities they will have heard of?? Pictures of some of the projects you have worked on??

Chartered Institute of Civil Engineering Surveyors

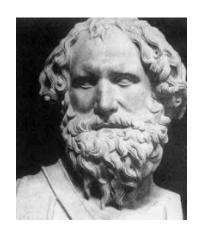
At this point is a really good time to play this video, it is a great tool to sum up what surveyors do in a very easy to follow style.

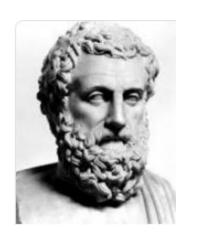


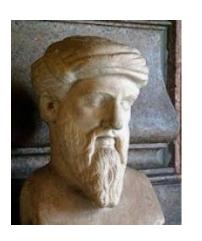


History

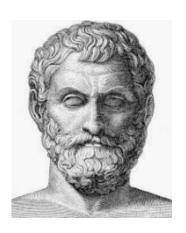
Where did it all start?











Talk a bit about how it started do they know any of these faces??

Old methods of surveying they might have heard of Interpret this to your specific form of surveying



What is GPS?



GNSS/GPS

Global Navigation Satellite Systems

- GPS/Navstar American
- GLONASS Russian
- Galileo European
- BeiDou Chinese
- Quasi Zenith Japan
- NAVIC India

Bring it quickly from old surveying practises into the 21st century so they can relate to it. Talk about misuse of the word GPS - in fact these are all types of satellites. They might know about some rocket launches?? Ask them how they might use GPS in their day to day life?

How do you use GPS?

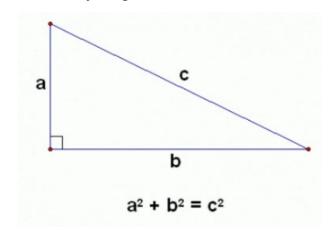




STEAM

Science, Technology, Engineering, Arts, Maths

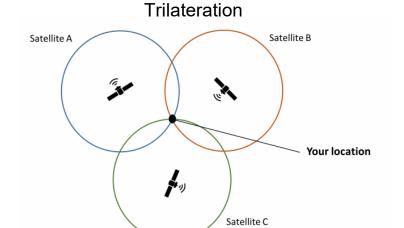
Pythagoras theorem



Geometry







Do they already learn about trig in school?? Talk about the applications of this in a career in surveying?

Do they know how satellites work – in relation to the previous slide?





Talk about other jobs in surveying some more examples perhaps and case studies that you have??

Jobs in Surveying



