



IDENTIFY, MAP & ANALYSE



View the full project page here: <https://teachwithgis.co.uk/pages/gkis>



GET KIDS INTO SURVEY (GKIS) AND **ESRI UK** BOTH LOVE MAPS, TECHNOLOGY, AND EXPLORING THE WORLD AROUND US!

GKIS HELPS YOUNG PEOPLE DISCOVER EXCITING CAREERS IN SURVEYING AND GEOSPATIAL TECHNOLOGY (THAT'S A FANCY WAY OF SAYING "USING MAPS AND DATA TO UNDERSTAND PLACES").

ESRI UK CREATES POWERFUL MAPPING SOFTWARE THAT PEOPLE ALL OVER THE WORLD USE TO SOLVE REAL-LIFE PROBLEMS, FROM PLANNING CITIES TO PROTECTING THE ENVIRONMENT.

BY WORKING TOGETHER, WE WANT TO SHOW KIDS HOW MAPS CAN HELP US EXPLORE NATURE, DESIGN SMARTER TOWNS, AND EVEN HELP DURING EMERGENCIES!



TASK 1 THE SURVEY

Follow the QR code to the app '**Survey123**' and follow the prompts on the survey.

You'll be exploring the area around you, assessing condition, measuring and figuring out direction...



TASK 2 IDENTIFYING PATTERNS

Now you've collected features from across your school site, let's see what patterns we can find in what was found and where things are!

A: FIND your school on the map and see how many of each type of feature was collected using the pie chart. Were there more of some features and less of others?

B: Look at all of your features on the map. What's the **TEA**?

Trend: What is the general overall pattern? Are they grouped together (clustered) or spread out (dispersed)?

Example: Provide specific evidence or data (e.g., say what the clusters are next to or near, or use the counter gauge to give a specific number in a cluster)

Anomaly: Are there features that don't fit the general trend - that stick out for some reason. Are they isolated from clusters, or are they a different kind of feature in a cluster with others.

Go in deep and think about **WHY**. What reasons might there be for features to group together? What might cause them to be spread out? Was it planned by the people who built/added the features or did the pattern happen naturally?

Tip: Open the **dashboard** in a new tab (the button for this is below the data/map)

TASK 3 DETAILS OF THE DATA

Next let's dive into the DETAILS. Click on the segments of the pie chart to filter the map.

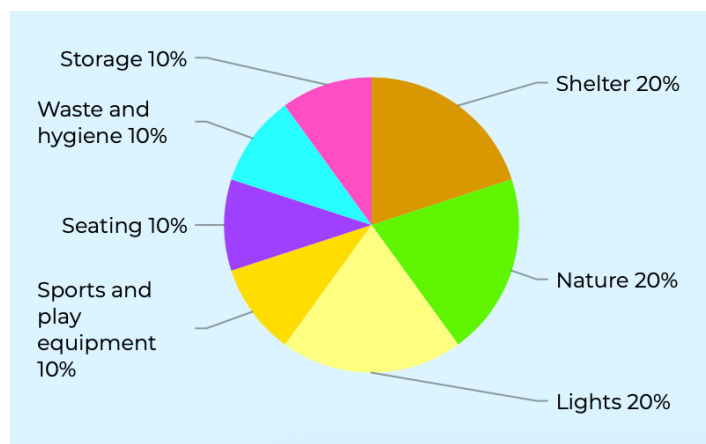
Think about the following:

How does the pattern change when we are looking at only some of the data? Do certain types of feature cluster together?

Why might this be?

When the data is filtered, what does this do to the condition indicator? Are some features in better condition than others?

Or does the condition change when zoom the map in to particular places around the school grounds?



TASK 4 MEASURING

Using the measuring tool on the map feature, let's see what distances we have here.

Which features are furthest apart? Which are closest together? Use the measure tool to find out exactly how close or far apart they are.

Furthest apart:

Closest together:

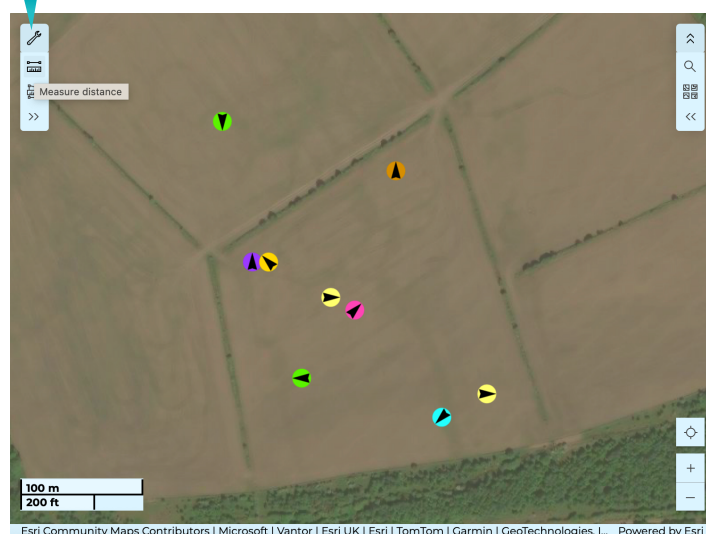
Now connect the outer data points together to find out the total circumference of the data collection area.

Circumference of the data collection area:

Area of the data collection area:

*Note: use the tools in the top left hand corner of the map to calculate these.

TOOLS



TASK 5 MAKING A POSITIVE CHANGE

Now you understand your site much better, how could you IMPROVE it? Think about all the points you collected. Is there something in bad condition that needs fixing? Or a part of the school that doesn't have a particular kind of feature it needs? Maybe an area needs some features removed to make it better for everyone?

Can you design the feature that you think needs the most improvement. Think about what features are used for, the colours and the size of the item. Use the worksheet below:

