



Title : Landmark Constructions

Class Level | Senior Classes **Teacher** | Ms. McEvoy

STEM CONTENT

SCIENCE

Materials

Forces

Designing and making skills

Investigating, questioning, communicating, classifying, measuring, inferring, predicting, observing, reasoning, problem-solving

TECHNOLOGY

- Using Kidrex/ Kiddle to research pictures and information on their given landmark
- Use Google slides to prepare a presentation on their landmark
- Use tablet to take photos to create a timeline of photos in constructing their pieces.

Recording, storing, analysing, demonstrating,

ENGINEERING

- Construction of famous European Landmarks- The Leaning Tower of Pisa, Big Ben, Newgrange, The GPO, The Colosseum, The Eiffel Tower, The Acropolis, The Lourve

Problem-solving skills, creativity, interpersonal skills, verbal and written communication skills, team-work

MATHS

- Number- operations (estimating)
- Measures- Length
- Shape and Space- lines and angles
- Problem Solving

Measuring, calculating, estimating, critical thinking, problem solving, analytical thinking, quantitative reasoning, logical reasoning, communication, time management, teamwork

Background Information

The children are learning about Europe, European cities and famous landmarks across Europe. (SESE link). Their task is to research about the design and features of their given landmark- The GPO, The Leaning Tower of Pisa, Big Ben, Newgrange, The GPO, The Colosseum, The Eiffel Tower, The Acropolis, The Louvre. They have been put in groups of 3-4 and then are given the STEM challenge to construct their landmark. They will need to use a variety of problem solving and decision making skills to complete their construction.

OBJECTIVES

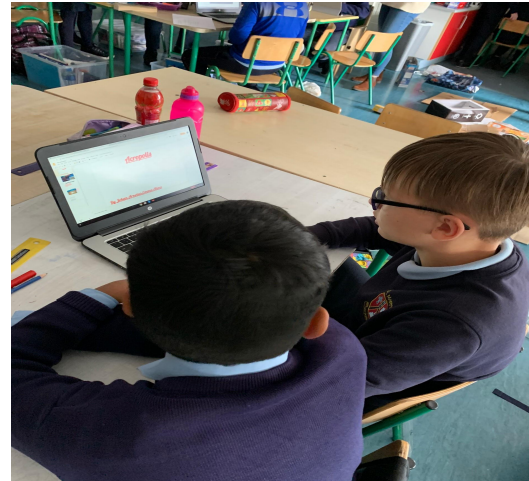
1. To research upon the design and structure of famous European landmarks.
2. To work collectively in a team in designing their landmark.
3. To make their construction of a European landmark using a variety of materials.
4. To understand which materials may be best suited to the task.
5. To create a PowerPoint presentation of background information on their landmark.
6. To create timeline of photos capturing from start to finish of their construction.
7. To relate results to predictions.

RESOURCES

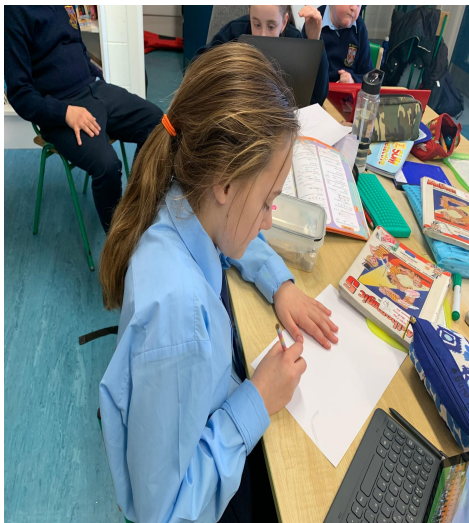
- Wide variety of materials (Cardboard, paint, scissors, sellotape, glue etc.)
- Measuring tape, paper, rulers
- Tablet/ipad/ chromebook (for google slides project/ recording timeline)

STEPS

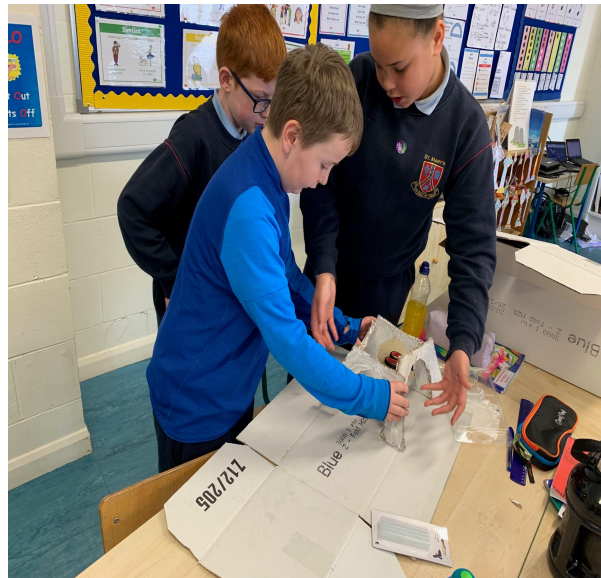
1. Children to be put in groups of 3/4 and given their landmark. They use chromebooks/ tablets/ ipads to research on the design and structure of their landmark. They examine photos and record the features of their landmark.



2. Children to discuss in their groups what design would work best for their construction. They draw an outline of their design and identify what materials they are going to use.



3. Children to begin their constructions.



CONCLUSION

1. Children can record themselves explaining their experiment and the results of the experiment for their SEESAW Journal or present it as a project using google slides.
2. Children to reflect on their experiment: *How did we carry out this experiment?*
What did we learn? What worked well?

EXTENSION/ DIFFERENTIATION OPPORTUNITIES

Children to use what they have learned to construct a variety of other famous building from across the world e.g. Great Wall of China/ Sydney Opera house etc.