

ENVIRONMENTAL LEARNING CARDS



EXPLORE & UNDERSTAND

GEOLOGY & EU10 BUILDING MATERIALS



ACTIVITY

Objective and outcomes:

- To understand that rocks are used for building
- Understanding that rocks are often processed before they are used for this purpose
- Understanding of basic map reading

Outline:

- Divide group into pairs/small groups
- Hand out map of school site or the local area with building material locations marked on it (as with an orienteering map – see diagram 1)
- Each pair is given a set of cards with photographs of different building materials. They have to match these to the locations on the map
- Use this as a basis for discussing where building materials come from

REVIEW & EVALUATION

- Topics for discussion:
 - What were the raw materials for these building items?
 - How have they been processed?
 - What properties do these materials have?
 - How do we find our way using a map?
 - Do building materials reflect the geology of the area?
- Each group researches a particular building material
- Prepare a collage using the results of this research

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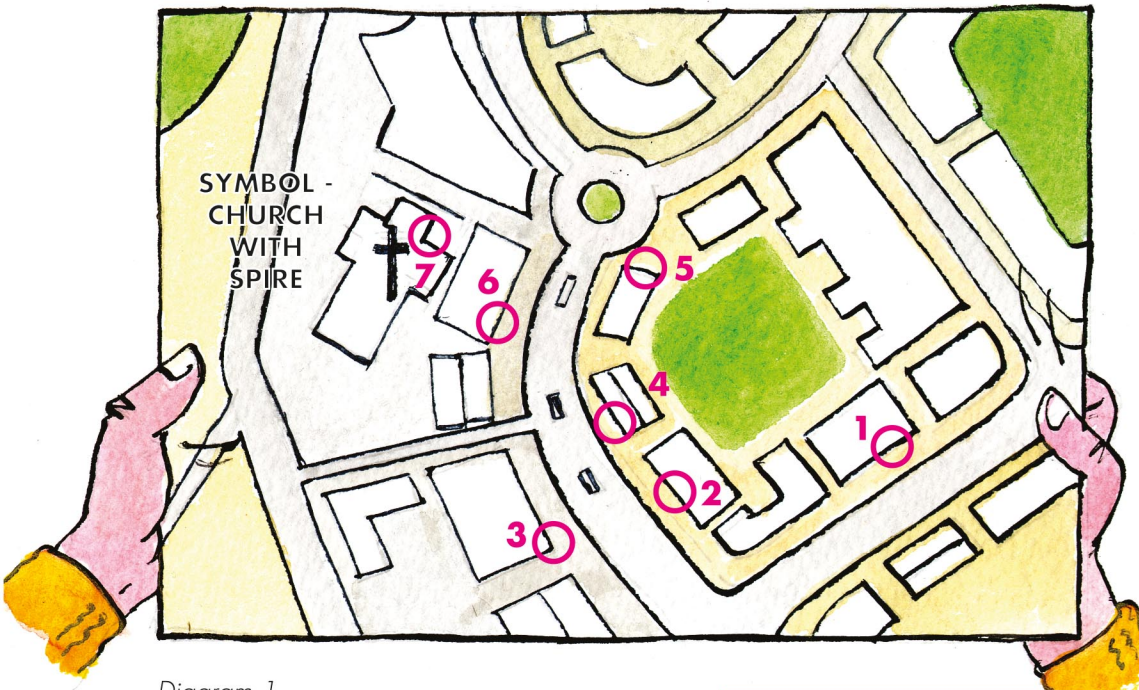


Diagram 1
Map shows street on main picture

LEADER'S NOTES

Preparation

- Prepare/obtain a map of school grounds or local area and mark on locations of different building materials
- Prepare cards including photographs. Types of materials might include; metal (ore), cement (limestone), concrete/breeze blocks (cement, gravels and sand), bricks (clay and sand), rock (marble, granite, slate, sandstone, etc.), tarmac (oil and gravel), pebbledash (cement and pebbles), chippings (various rock types) and glass (sand, soda ash and lime)

Resources

- Maps and cards
- 'Materials'
- Google Earth

References

- www.maps.bgs.ac.uk/geologyviewer_googleviewer.html
- www.i-deauk.com/education/school_site_maps
- www.bgs.ac.uk/britainBeneath/

DIFFERENTIATION & PROGRESSION

- Use photographs of materials as they are when used for building. Use photographs of materials in their unprocessed state
- Ask young people to prepare their own map and mark on it as many different types of non-organic building materials as they can
- Ask pupils to carry out a similar study at home and compare their findings on a local map. Relate to a local geology map
- Visit another location that makes use of very different building materials
- Research building materials from different regions of the world
- Visit a quarry, brick factory etc.
- Link to Weathering card, EU12
- Link to role play of habitat destruction and restoration (see Plant Discovery card AE3)