

Quarry through the window – what would you see, what would you not see? Asking pupils to ‘picture’ what a ‘quarry through the window’ might look like

Look through the window or doorway. If there was a quarry out there, what might you see or not see? Ask your pupils to picture what a quarry might look like, or what the natural screens around many of today’s quarries might look like instead.

The school and most other buildings are made of different sorts of building blocks, bricks and stones. All of these are made from material that came from quarries. Without quarries we couldn’t build. But what do quarries look like today? If there was a quarry outside now, what would it look like?

You might see a quarry like this:



View of MQP’s Cliff Hill Quarry in Leicestershire, UK

Or this:



Inside MQP’s Cliff Hill Quarry, Leicestershire, UK

- What would you see? How big might it be? What colours? What layers? What machinery? What activity?
- What would it look like when the rock was being blasted out by explosions?
- What would you hear? What would you feel?



A blast at MQP’s Cliff Hill Quarry, Leicestershire, UK

Quarries today are usually screened by banks and trees so instead of the quarry – you might see the screening.

- What might the screening look like?



Natural screening at a Brett Aggregates site in Faversham, Kent, UK

If you couldn’t see the quarry because of the screening:

- What then might you see, hear and feel?

After quarrying has ended, the quarry would be landscaped.

- What might a landscaped quarry look like if seen from your window?



A restored quarry, Lackford Lakes – Cemex UK

The back up

Title: Quarry through the window – what would you see, what would you not see?

Subtitle: Asking pupils to ‘picture’ what a ‘quarry through the window’ might look like

Topic: Pupils are asked to try to picture what a quarry seen through the window might look like if you could see the quarry, or if it were screened, or if quarrying had ended and the quarry had been landscaped.

Age range of pupils: 8 – 18 years

Time needed to complete activity: 15 mins

Pupil learning outcomes: Pupils can:

- describe what an active quarry might look, sound and feel like;
- describe what quarry screening might look like;
- describe what a landscaped quarry might look like;
- explain why quarries are needed.

Context:

Many people don't realise that, to build our buildings, to construct transport links and to make dams and reservoirs, we have to extract millions of tonnes of material from the ground – and that this comes from quarries. Most people would not like a quarry in their ‘backyard’, but quarries have to be sited where the materials are found underground, and not too far from where they are needed, because it is very expensive to transport bulk materials like quarry products for long distances. So, some rock, sand and gravel quarries and clay pits have to be sited near towns and cities.

If they are sited near towns and cities, because of the strict planning regulations in many countries today, not only would the quarry be hidden by screens when the quarry was in action, but it would be landscaped afterwards and often would be used later as an amenity by local people (water park, golf course, etc.) or for waste disposal.

- What would you see? How big might it be? What colours? What layers? What machinery? What activity? *You would see a large hole excavated into rock - since modern quarries are mostly large. The colours could be any common rock colours, e.g. grey, pink, red, yellow, black. Most rock layers in quarries are fairly flat, but steeply sloping layers can sometimes be seen. There are often benches too, like flat ‘steps’ in the quarry. There will be excavation machinery, e.g. diggers, scrapers, and transporting dumper trucks. There may be conveyor belts to move the material and machinery to crush*

and sort the material. There might be lots of activity from moving vehicles, and the drilling of holes for the next blast.

- What would it look like when the rock was being blasted out by explosions? *A big cloud of dust with some rock fragments.*
- What would you hear? What would you feel? *A few moments after seeing the blast, you might hear the sound, and the ground might shake if you were not too far away.*
- What might the screening look like? *It looks just like the normal landscape, with banks, trees and other vegetation.*
- If you couldn't see the quarry because of the screening: What might you see, hear and feel? *You might still hear and feel the explosive blasts.*
- After quarrying has ended, the quarry would be landscaped. What might a landscaped quarry look like if seen from your window? *In some reclaimed quarries, rock faces and sand banks can still be seen. All have trees, bushes and other vegetation. Some have pools or lakes. Old quarries are excellent for wildlife and so a wide range of animals, birds and insects may be seen.*

Following up the activity:

Why not visit a working quarry. Nowadays, many quarry operators welcome visitors so that they can explain the importance of quarrying and show what they are doing to minimise the impacts on local communities. Old quarries can be very dangerous though, and should not be visited without permission and rigorous risk assessment.

Underlying principles:

- Quarries are necessary for development.
- A wide range of measures is usually taken today during and after quarrying to minimise impacts on local people.

Thinking skill development:

Pupils are asked to ‘bridge’ their experience to the ‘view through the window’.

Resource list:

- a window and a good imagination

Useful links:

See the Quarry Products Association Virtual Quarry website: <http://www.virtualquarry.co.uk/virtualquarry.htm>

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