



# Engaging Places

A resource to support teaching and learning through buildings and places



## Windows: a building's eyes (1), by Rob Deane, Oak Hill School

Curriculum subject/s	Science
Key stage/s	KS2
Curriculum outcomes	Sc4 Physical processes 3a, b.
Lesson objectives	Pupils understand the meaning of transparent, translucent and opaque. Pupils can record results from a test.

**The first of two lessons looking at how light travels through materials. Leads onto a study of window styles and an art activity.**

### Starter

- Ask pupils to explain what the purpose of a window is. Look for: lets light in, allows people to see out, decoration, etc. Show them something transparent, translucent and opaque. See if they know the meaning of the three key words. Demonstrate the qualities using a torch. (10)

### Main

- Pupils to log on to [http://www.bbc.co.uk/schools/ks2bitesize/science/physical\\_processes/light\\_shadows/read2.shtml](http://www.bbc.co.uk/schools/ks2bitesize/science/physical_processes/light_shadows/read2.shtml) This will introduce them to how light travels through materials. It also reinforces the meaning of the key words: translucent, transparent and opaque. (10)
- Give pupils a copy of test sheet available at [http://www.primaryresources.co.uk/science/pdfs/light\\_travelling.pdf](http://www.primaryresources.co.uk/science/pdfs/light_travelling.pdf) and test the materials. Put results on the board and refer back to transparent, translucent and opaque. (15)
- Pupils group the materials into their categories and make a wall display. (20)

### Just around the corner

Visit a modern building with lots of glass and compare this with an older building. Focus on the effect these differences have on the interiors of each

## **Plenary**

- Discuss different types of windows. Ask pupils when we might want translucent windows (bathrooms, some classrooms, etc). Show pictures of Japanese windows that are translucent. Introduce the idea that they can change the windows in their classroom – what would they like them to look like? (5)

## **Homework**

Think of a theme for a window design ready for the next lesson e.g. World Cup window with flags, footballs and shirts, etc.

## **Assessment for learning**

Formative:

Through questioning and discussion during starter.

Summative:

Assess wall displays.

## **Resources**

- Transparent, translucent and opaque materials for starter.
- Torch.
- Access to internet
- Engaging Places 'in your area' - [www.engagingplaces.org.uk](http://www.engagingplaces.org.uk)

## **Cross-curricular links**

ICT: Use of interactive websites.

Personal, learning and thinking skills: Effective communication to the class.

This resource is from a bank of resources created for Engaging Places by practising teachers and education professionals. If you have ideas for using buildings and places in teaching and learning, and would like to help us create further resources, please email: [engagingplaces@cabe.org.uk](mailto:engagingplaces@cabe.org.uk)