Sample Lesson Plan

Lesson	Plan	Resources	National Curriculum Links
1. Understand what sustainability is.	Introduction video (on website) Question 1: (from website) **How many different types of building can you name?** Build a list as a class (possible interactive option of using apps like wooclap to gather children's responses) before revealing the answers, have the children developed any that aren't on the list? Question 2: (from website) **What materials are used to make the home you live in? What about your school? Are they different?** Discuss in talking partners and as a class. Question 3: (from website) **How many different building materials can you think of?** Give children chance to discuss seeing images, before revealing the answers. Question 4: **Sustainability – what is it?** Gather children's ideas before sharing the definition - 'Environmental Science. The quality of not being harmful to the environment or depleting natural resources, and thereby supporting long-term ecological balance'. Question 5: **How are we sustainable?** Ensure children discuss recycling and reusing, electric cars, renewable energy sources, growing your own produce.	Better Building Website UN sustainable goals	Year 4 - solid, liquids, gases. **For example:** Building materials need to be a solid – why? Carbon dioxide – why can't we see it? gas Year 4 - electricity, **For example:** renewable energy sources. Year 5 – Materials – **For example:** give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic

Sample Lesson Plan

Lesson	Plan	Resources	National Curriculum Links
2. Identify the most sustainable traditional materials.	Recap: Question 1: Sustainability – what is it? 'Environmental Science. The quality of not being harmful to the environment or depleting natural resources, and thereby supporting long-term ecological balance'. How are we sustainable? Can children add any more ideas from last week? Recap: Carbon dioxide introduction (on website). Traditional materials (on website) - work through each material on the website, giving children opportunity to fill in the boxes on the worksheet if using. Thinking question after exploring the information on traditional materials: If I built a house using traditional materials, I would use.... because ….	Better Building Website|Traditional Materials Traditional Materials Worksheet	History - period of time linked to current learning.
3. Identify the most sustainable alternative materials.	Recap: Question 1: Sustainability – what is it? 'Environmental Science. The quality of not being harmful to the environment or depleting natural resources, and thereby supporting long-term ecological balance'. How are we sustainable? Can children add any more ideas from last week? Recap: Carbon dioxide introduction (on website). Alternative materials (on website) - work through each material on the website, giving children opportunity to fill in the boxes on the worksheet if using. Thinking question after exploring the information on alternative materials: How carbon efficient were (time in history the children have studied) homes?	Better Building Website|Alternative Materials Alternative Materials Worksheet	History - period of time linked to current learning.

+ Sample Lesson Plan

Lesson	Plan	Resources	National Curriculum Links
4 Plan a sustainable building.	Children to look back at their work from the last two sessions to remind themselves of the traditional and alternative materials they have explored. Discuss which were the materials with the lowest carbon emissions. Challenge: How low can you make the carbon in your building? Discuss the questions as a class – before the complete their planning. • Where would your design be built? • Who would it be for? • What would be it's purpose? (E.g. a building on school grounds like a library, extra classroom or a new home for their family in the local village or town) - links to local geography. Discuss the questions (from the website) as a class, before they complete their planning. • What type of roof will you design? • Will it be flat or sloping? • Will you use traditional materials or a newer alternative? • What will you use to make the foundations? (Click on link on website) • Is your building tall and thin or low and wide? • Is some of your building buried or below ground? • What material will the walls be made of? • Can you use more than one material to make the walls? • How strong will the walls need to be to hold up the floors and roof above?	Better Buildings Website|Things to consider Plan a Sustainable Building Worksheet	KS2 D&T. Geography – links to local geography.

Lesson	Plan	Resources	National Curriculum Links
5. Design a sustainable building.	Review last week's planning ideas – are their plans sustainable? How do they know? Show children the example drawing on the website. Model drawing a plan on the whiteboard/interactive board using some of the ideas the class share from their planning ideas, to help them understand using rulers, annotating, developing a key and referring to the plan to support their design. Children to design their building on chosen format by teacher. (Computer/ paper) Children to write a brief description of why they designed their building. Can children evaluate their own and each other's buildings?	Better Buildings|SGP Example Design Worksheet	KS2 D&T & Art

