Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Home Sweet Home**

When we build shelters there is always a lot of wasted resources/material left over, such as wood, concrete, tiles, bricks, pavers, lawn (if it is part of the building contract) and cables and wiring. Modern shelters use electricity (power for lighting, cooling, electronic devices, cooking) and gas (for heating and cooking).

**Problem:** Think about what is used to make all the materials used for building a shelter. If we continue to keep using all these resources what will the impact be on our planet?

**Challenge:** Using the materials from the recycle centre, you need to design your own ecofriendly shelter using the ‘**criteria for success**’ that you developed as a class.

1. Using the materials from the recycle centre you need to make a list of appropriate materials to use to build your ecofriendly shelter.

**Materials**

**Criteria**

2. As a class decide on what the shelter needs to include to be a successful living environment.

Fill in the table below.

|  |  |
| --- | --- |
| **Description** | **Criteria** |
| Number of rooms |  |
| Materials outside(What materials are used for the outside of the shelter?) |  |
| Materials inside(What materials will be used inside the shelter?) |  |
| Weather conditions(What are the weather conditions around the location of the shelter? Does the whole shelter have to be waterproof?) |  |
| Resource waste(How much waste does the construction of your shelter produce) |  |
| Sustainability(Are you able to help the environment as well as constructing a shelter?) |  |

**3. Solution**

**Draw and label a diagram of your ecofriendly shelter.**

**Labeled Design of Shelter**

**4. JUSTIFY**

You will need to justify your choice of materials, including the climate you are building your shelter for, the durability of materials, type of shelter, how your shelter will use natural elements eg. Sun, wind, geography, location.

|  |  |
| --- | --- |
| **Choice of Material** | **Reasons for use** |
| Climate |  |
| Durability |  |
| Use of natural elements eg. Sun, wind |  |
| Geography eg. Use of hills, trees, water, flat ground |  |
| Location |  |