

Housing in the 1500s

Student booklet

Name: _____



Challenges in science and technology also include designing objects to tame the world around us. A new need? What are the constraints? What knowledge is needed? What is the solution?

Your mission

As inhabitants in North America in the 1500s had to do, you will have to design and build a shelter that will protect you from the **climate** and keep you safe.

You will have to respond to the **needs** of a **sedentary or nomadic** lifestyle and respect the **constraints** and requirements that such a lifestyle imposes.



Specifications booklet

The prototype of the shelter must:



- be designed to respond to the constraint of a **nomadic or sedentary** lifestyle;
- Be made solely from the materials, equipment and tools put at your disposal;
- Be accompanied by an explanatory leaflet about its design.





Context related to everyday life

Before starting, let's think a bit.

1. What is a **sedentary** lifestyle?

2. What is a **nomadic** lifestyle?

3. In 1500, what **tools** and what **materials** were available?

4. At the time, from what did we need protection in the forests of North America?

Cr1 Appropriate description of the problem	Reformulation of the problem	
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Photograph 1: The forest in winter



Photograph 2: The forest in summer

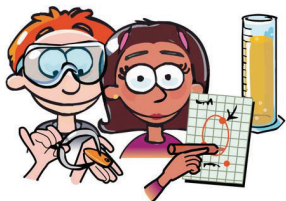


Initial ideas

In your own words or using a sketch, explain what you want to do. Justify your choice.

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Cr1 Appropriate description of the problem	Formulation of a tentative solution	
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Planning and carrying out

Observe the materials, the equipment and the tools available and plan your process.

Design of a shelter for a: ☐ Nomadic or ☐ Sedentary lifestyle.

Materials, equipment and tools:

Materials	To simulate...	Equipment and tool(s) necessary for the design

Show your design process for the shelter using a sketch on which you can add all the information you feel is necessary.

- Think of the framing (structure, armature) and of the cladding (outer covering).

Cr2 Application of an appropriate procedure	Planning of work	
	Implementation of procedure	
	Readjusting the process, as required	
Cr3 Appropriate use of instruments, tools or techniques	Handling of objects, tools or instruments	
	Observance of safety rules	

<i>Planning and carrying out</i> Explanatory leaflet		
Make a sketch or diagram of your final prototype (or glue a picture). Add all the necessary information.		
Cr4 Appropriate use of scientific and technological knowledge	Production of explanations or solutions	



Outcome

1. Does your prototype clearly respect the constraints in the specifications booklet?

Respect for the nomadic or sedentary lifestyle. ☐ Yes ☐ No

Explanations:

Respect of available materials, equipment and tools. ☐ Yes ☐ No

Explanations:

2. Observe your prototype and think about how your work unfolded (planning, use of tools and equipment, implementation).

Present an unforeseen event or a difficulty you encountered during design. Relate what you did.

Cr2 Implementation of an appropriate process	Implementation of procedure	
Cr4 Appropriate use of scientific and technological knowledge	Production of explanations or solutions	

Outcome
What I learned



My definition



☐ Need: _____

☐ Design: _____

☐ Materials: _____

☐ Resource: _____

What else did you learn?