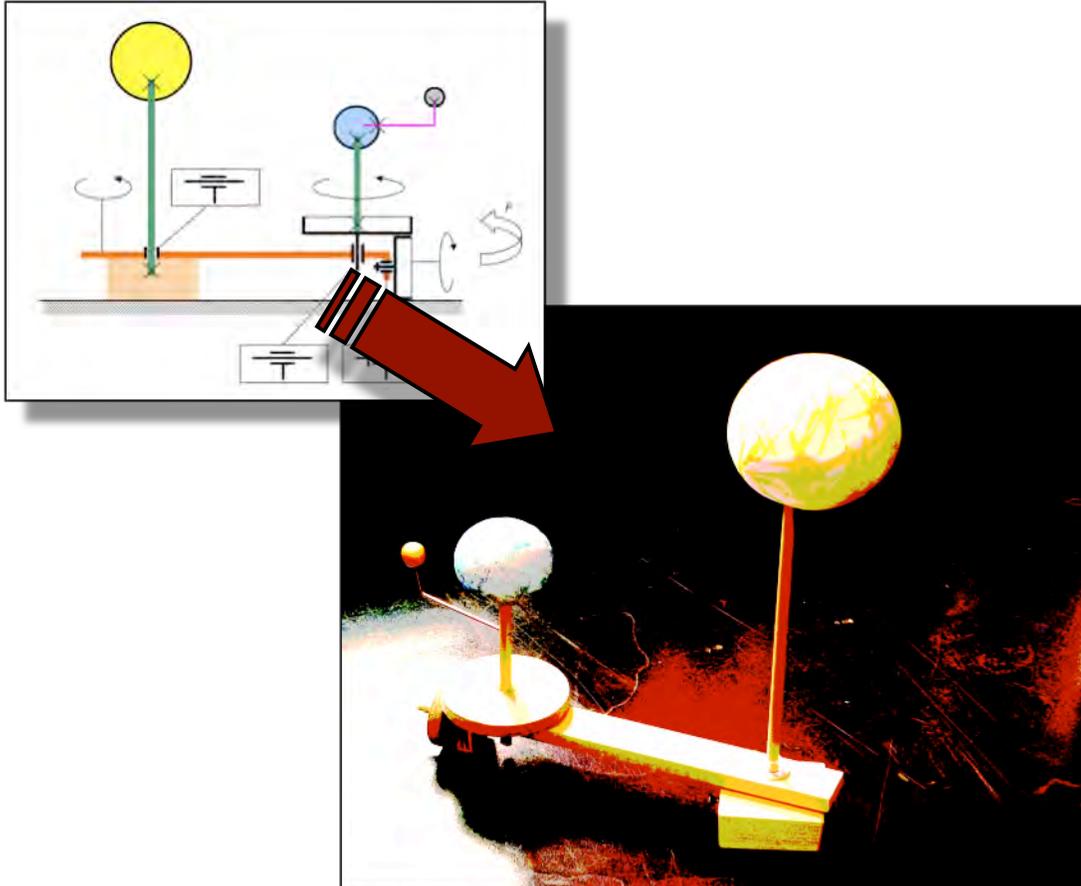




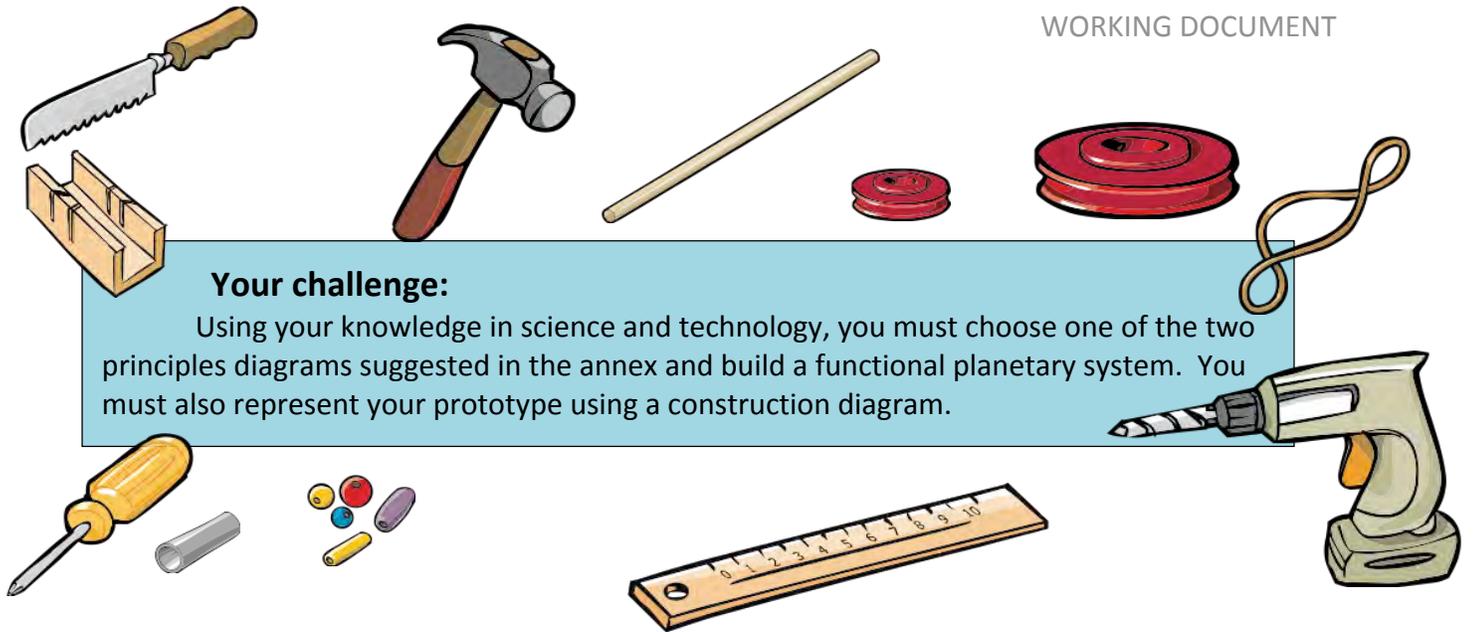
centre de
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*pour la formation générale
en science et technologie*



Going from 2D to 3D...

(Shifting from the principles diagram to the real object)

June 2011



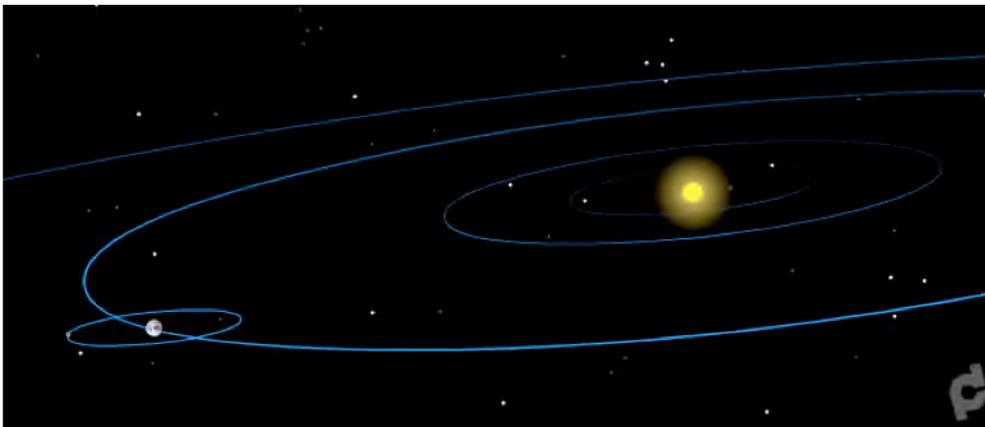
Your challenge:

Using your knowledge in science and technology, you must choose one of the two principles diagrams suggested in the annex and build a functional planetary system. You must also represent your prototype using a construction diagram.

To help you take up the challenge, do not hesitate to consult the reference documents suggested on the diagram. It will help you familiarise yourself with the models presented and to the materials and tools at your disposal.

Some questions to guide your work:

1. Are there existing conventions that dictate the point of observation of the solar system in order to describe the relative movements of the planetary bodies?
 - Which bodies move in the Sun - Earth - Moon system?



Source: Centre de développement pédagogique website (*Documentation* section) - www2.cslaval.qc.ca/cdp

2. What is represented by large full arrows on a principles diagram?
3. How do you represent what is fixed on a principles diagram?
4. How do you represent what can move on a principles diagram?
5. Can you identify what is fixed and what can move on your selected diagram?

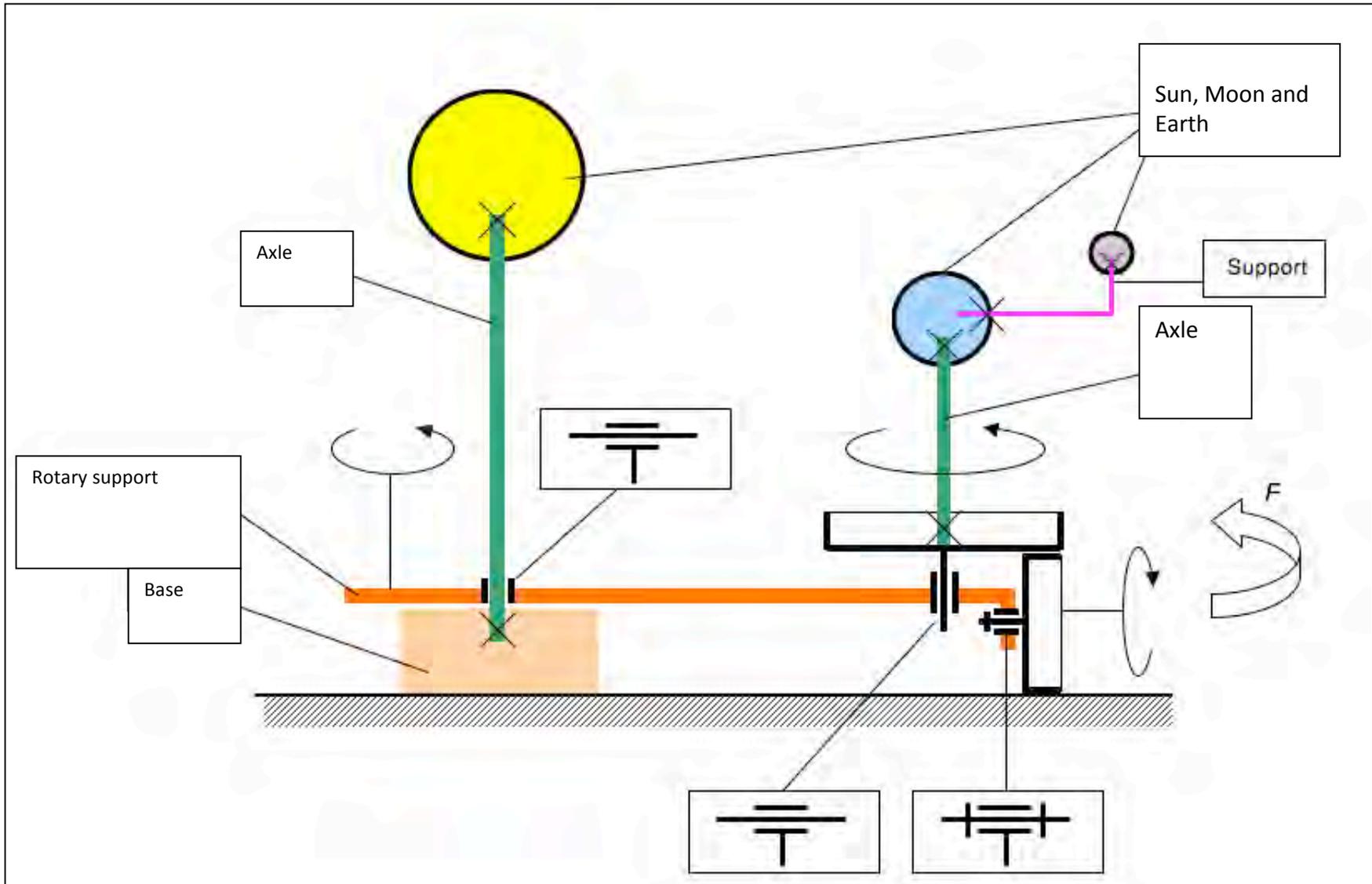
In the annex found in the next few pages, you will find two diagrams that illustrate two distinct principles diagrams for a planetary system. Both principles work and allow for the illustration of the Sun - Earth - Moon system.

Using the materials and tools put at your disposal, you must build a prototype that conforms to the diagram of your choice, and illustrate it using a construction diagram.

Construction diagram for the planetary system prototype _____



Planetary system 1



Planetary system 2

