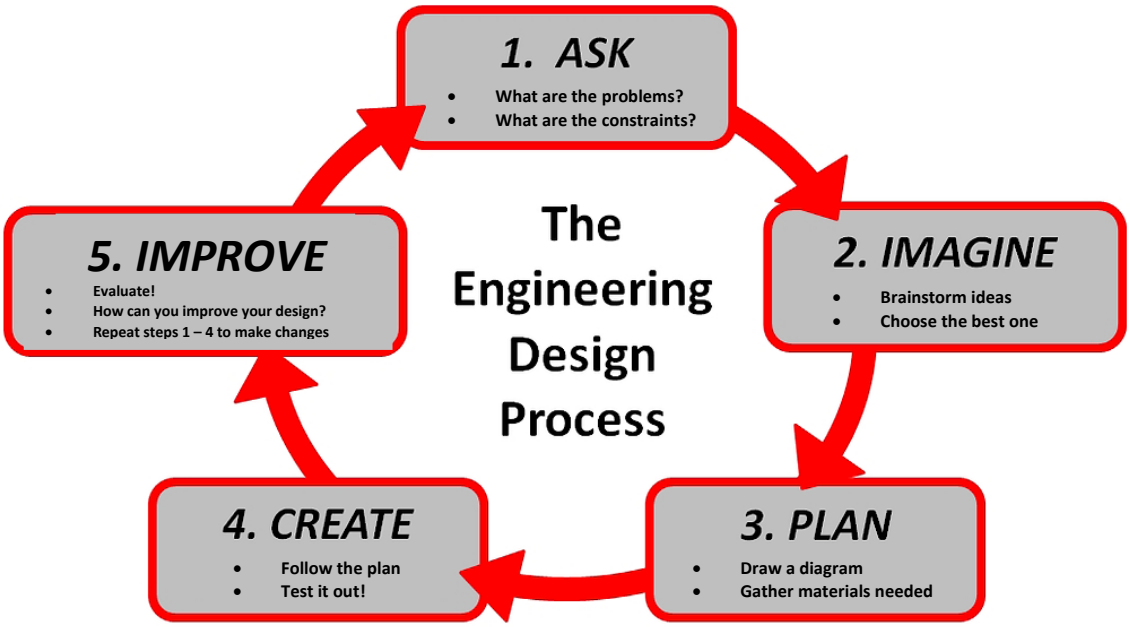
F.2 ____ Name: _____ Date: _____

F.2 STEAM Project – Our SMART School
ICT X Integrated Science X Visual Arts
Introduction

In the STEAM project, you are going to design your SMART school!
Each group will be responsible for each of the following areas in our school:

1. **Open playground**
2. **Tuck shop**
3. **School gym**
4. **Library**
5. **Laboratories (GS Lab, ICT Lab)**
6. **Special rooms (Art room, Needlework room, Home Economics Room, Music Room)**

Engineering Design Process (EDP)



Group no.: _____

Location: _____

Group members: _____

_____

_____

Location:

_____ Group: _____

Problem 1 (Related to temperature control; based on what you have learnt in IS lessons!)

Value: _____

Describe the problem: (1 mark)

_____

_____

Using the concepts of heat transfer, describe and explain how you are going to solve the problem. (3 marks)

Describe: _____

_____

Explanation: _____

_____

_____

_____

Material / instrument(s) needed: (1 mark)

_____

_____

Show us your design in the spaces below:

Problem 2 (Related to energy conservation; based on what you have learnt in IS lessons!)

Value: _____

Describe the problem: (1 mark)

_____

_____

Using the concepts of energy conservation, describe and explain how you are going to solve the problem. (2 marks)

Describe: _____

_____

Explanation: _____

_____

_____

_____

Material / instrument(s) needed: (1 mark)

_____

_____

Show us your design in the spaces below:

Problem 3

Value: _____

Describe the problem: (1 mark)

_____

_____

Describe and explain how you are going to solve the problem. (3 marks)

_____

_____

_____

_____

_____

_____

Material / instrument(s) needed: (1 mark)

_____

_____

Show us your design in the spaces below:

Problem 4 (Optional)

Value: _____

Describe the problem: (1 mark)

_____

_____

Describe and explain how you are going to solve the problem. (2 marks)

_____

_____

_____

_____

_____

_____

Material / instrument(s) needed: (1 mark)

_____

_____

Show us your design in the spaces below: