

Independent Learning Task - Spring Term 2012

D.T Bridges

Objectives

- To design, evaluate and produce a bridge from any chosen materials.
- To make a bridge strong enough to hold a 100g weight.

Tasks

- Research three different bridge constructions.
- Design one type of bridge.
- Design a second bridge.
- Evaluate and compare bridges, choosing best design.
- Make prototype of chosen bridge and evaluate it.
- Make bridge.
- Evaluate final product.

Success Criteria

Must:

Be able to design, make a prototype and produce a bridge to hold 100g weight.

Should:

Be able to draw detailed designs, make and evaluate a prototype. To produce a bridge to hold 100g weight.

Could:

Be able to draw detailed designs, make and evaluate a prototype. To produce a bridge to hold 100g weight and explain how they changed the bridge following their evaluation.

Name:



Bridges - Research Sheet 1
**Look closely at
the bridge to answer these questions**

What does it look like?

What different parts are there?

Who would use it?

What kind of bridge is it?

Picture of Bridge.

How has it been made strong and stable?

What do you think it is made from?

Why might these materials have been used?

Name:



Bridges - Research Sheet 2
**Look closely at
the bridge to answer these questions**

What does it look like?

What different parts are there?

What kind of bridge is it?

Picture of Bridge.

Who would use it?

How has it been made strong and stable?

What do you think it is made from?

Why might these materials have been used?

Name:



Bridges - Research Sheet 3
Look closely at
the bridge to answer these questions

What does it look like?

What different parts are there?

Who would use it?

What kind of bridge is it?

Picture of Bridge.

How has it been made strong and stable?

What do you think it is made from?

Why might these materials have been used?

Name:

Design Project

You have been asked to design and make a model for a bridge that will hold 100g.

Draw the structure that you think will be the strongest and the most stable.

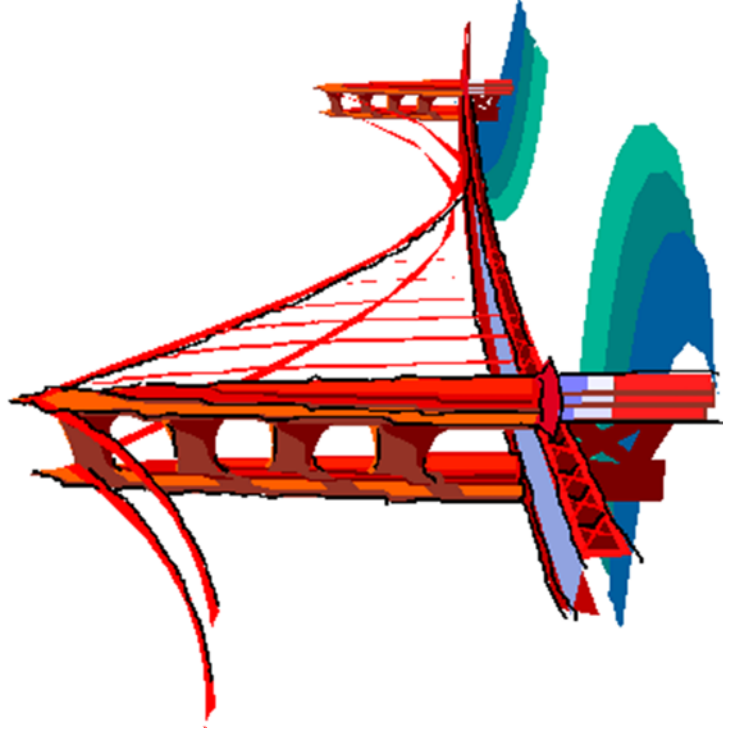
Criteria: Your bridge must....

- _____
- _____
- _____

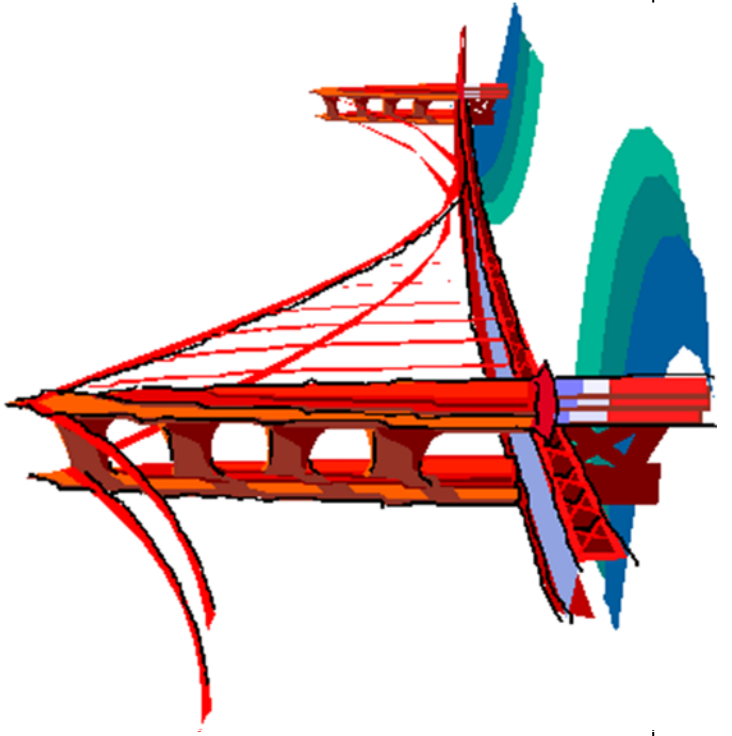
Other information.....



My design ideas! Design 1



My design ideas! Design 2



Name:

It will be made from:

My chosen design!
(Draw your design in this box.)

I will make it strong by:

I will make it stable by:

The tools I will need are:



Name:

The Building Process



On this sheet, show the stages that you went through to build your bridge. You can use photographs or drawings to help show the different stages.

1.	2.	3.
4.	5.	6.

7.	8.	9.
10.	11.	12.
Evaluation of the build.....		

Name:

Evaluation Sheet

Task:

Things I found easy:

Things that were hard to do:



New things I learned:

Improvements I could make:

Feedback Form

Student's Views:

What parts of the ILT do you think were the most valuable?

Is there anything in this ILT that you think should be changed?

Parents' Views:

What were your overall impressions of the ILT?

