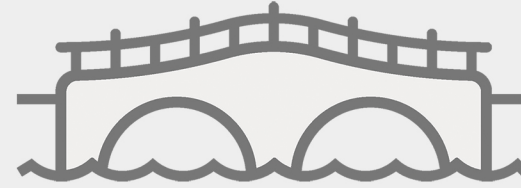


BRIDGES ON THE TAY



INTRODUCTION

There are currently more than fifteen bridges which span the River Tay. If you have one of these on your doorstep, it can be an excellent focus for exploring your local history, or look at a number of bridges as a way into investigating engineering and construction.

We suggest some generic approaches for investigating your local bridge and for exploring bridge construction together with learning activities. Following these, we provide a brief fact file for some key bridges and an overview of the content for pupils shown on the website.

SUGGESTIONS FOR TEACHING AND LEARNING ACTIVITIES

INTRODUCTORY ACTIVITIES

Investigate the history of your local bridge.

Carry out a site visit investigating the bridge. Take photographs and/or sketch. Make notes on:

- The number of arches (if any)
- How the bridge is supported
- What the bridge is made of
 - Any decorations
 - Any inscriptions

Discuss what you have found out. What new questions do pupils now have? What would they like to investigate?



BRIDGES ON THE TAY



SUGGESTIONS FOR TEACHING AND LEARNING ACTIVITIES

CURRICULAR AREA

Social Studies:
People, Past Events and
Societies

EXPERIENCES & OUTCOMES

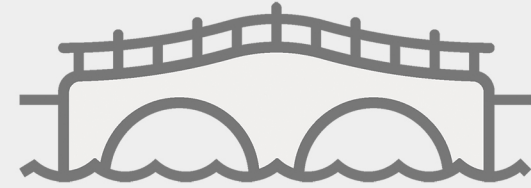
I can use evidence to
recreate the story of a
place or individual of local
historical interest.
SOC 1-03a

KEY LEARNING ACTIVITIES

Investigate the building of
the bridge. When was it
built? Who designed it?

Create a leaflet or poster
illustrating the history of
the bridge.

BRIDGES ON THE TAY



SUGGESTIONS FOR TEACHING AND LEARNING ACTIVITIES

CURRICULAR AREA

Social Studies:
People, Past Events
and Societies

EXPERIENCES & OUTCOMES

I can compare aspects of people's daily lives in the past with my own by using historical evidence or the experience of recreating an historical setting.
SOC 1-04a

I can compare and contrast a society in the past with my own and contribute to a discussion of the similarities and differences.
SOC 2-04a

KEY LEARNING ACTIVITIES

Research how people crossed the river before the bridge was built. Can you find details about ferries in your local history archives? Look in your local graveyard for any graves for ferrymen. Were there any ferry disasters?

Create imaginative writing describing crossing the river by ferry.

BRIDGES ON THE TAY



SUGGESTIONS FOR TEACHING AND LEARNING ACTIVITIES

CURRICULAR AREA

Social Studies:
People, Past Events
and Societies

EXPERIENCES & OUTCOMES

I can use primary and
secondary sources
selectively to research
events in the past.
SOC 2-01a

KEY LEARNING ACTIVITIES

Identify 2-3 key events in
the history of the bridge.
Research these events
using old newspapers and
material from your local
history archive.

Create a leaflet or audio
tour highlighting the
history of the bridge.

BRIDGES ON THE TAY



SUGGESTIONS FOR TEACHING AND LEARNING ACTIVITIES

CURRICULAR AREA

Technologies: Craft, Design, Engineering and Graphics Contexts for Developing Technological Skills and Knowledge

EXPERIENCES & OUTCOMES

Introductory Activities

KEY LEARNING ACTIVITIES

Using maps, identify the bridges of the Tay. Look for images of them all. What different bridge designs are there?

Investigate your local bridge, either by making a site visit or through research.

Make notes on:

- What the bridge is made of
- What it carries (people, cars, trains, services)
- What supports the bridge
- What kind of bridge it is.

Find out who the engineer of the bridge was.

BRIDGES ON THE TAY



SUGGESTIONS FOR TEACHING AND LEARNING ACTIVITIES

CURRICULAR AREA

Technologies: Craft, Design, Engineering and Graphics Contexts for Developing Technological Skills and Knowledge

EXPERIENCES & OUTCOMES

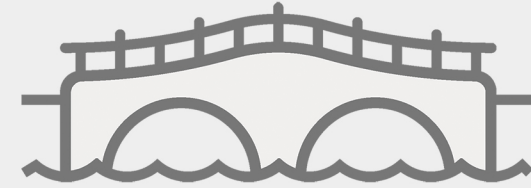
I explore materials, tools and software to discover what they can do and how I can use them to help solve problems and construct 3D objects which may have moving parts.
TCH 1-12a

By applying my knowledge and skills of science and mathematics, I can engineer 3D objects which demonstrate strengthening, energy transfer and movement.
TCH 2-12a / TCH 3-12a

KEY LEARNING ACTIVITIES

Using construction kits/ art straws/ rolled up newspaper/ dried spaghetti and marshmallows, design and make a bridge to bear a specified weight and span a specified distance.

BRIDGES ON THE TAY



PUPIL RESOURCES

MEDIA FOR DUNKELD
BRIDGE

MEDIA FOR CAPUTH
BRIDGE

MEDIA FOR ABERFELDY
FOOTBRIDGE

MEDIA FOR WADE'S
BRIDGE, ABERFELDY

MEDIA FOR FRIARTON
BRIDGE

MEDIA FOR SMEATON'S
BRIDGE

MEDIA FOR QUEEN'S
BRIDGE, PERTH

MEDIA FOR TAY RAIL
BRIDGE

FURTHER RESOURCES FOR TEACHERS

Bridge Design

A very thorough and useful resource relating to all aspects of bridge design. Produced to support the National Curriculum of Northern Ireland but contains many good resources and suggestions for learning activities.

http://ccea.org.uk/sites/default/files/docs/curriculum/connected_learning/thematic_units/stem/tu_bridges.pdf

Scotland's Oldest Bridges

A map-based resource providing information and some images on Scotland's oldest bridges, those built before 1750.

<http://scotlandsoldestbridges.co.uk/index.html>