



BRONZE AWARD

MAKE A WOODEN PENDANT



Typically 10+ hours of project work
Recommended for 11-14 year olds



**Design & make
project**

Research, design and make a
wooden pendant.

#materials

#textiles

#fashion



HOW TO RUN CREST USING THIS ACTIVITY

Looking for some support? Find a mentor by contacting your local STEM Ambassador hub:
www.stem.org.uk/stem-ambassadors/local-stem-ambassador-hubs

To use their project to achieve a Bronze CREST Award your students will need to:

- **Complete a minimum of 10 hours of project work**
- **Consider the broader impact of their project and demonstrate an innovative approach**
- **Complete the project workbook or short report in another medium**
- **Reflect on their work during the project using a student profile form**

Preparation

Ready to get going with CREST? Sign up for a CREST account here: www.crestawards.org/sign-in

Create a new Bronze Award project with the name(s) of the student(s) and the title of their project. If you don't have all the details, you can fill these in later!

Run the project

We have some super handy workbooks and profiles for your students to use when running a CREST Award. You can download these when you create your CREST account by following the link above.

Encourage your students to use the workbook or profile to plan and carry out their project, keeping a record of all their amazing progress.

Make sure you consider safety and risks!

Reflection

So, your students have been hard at work and completed their CREST project, but don't let this be the end of their learning. They should now fill in any remaining sections of their workbook. This is a chance for them to reflect on all the interesting things they've learnt and the invaluable skills they have used.

Enter your project for a Bronze CREST Award

Hard work deserves a reward! Celebrate and certify your students' achievements by entering their project for a Bronze CREST Award. Simply:

Log in to your CREST account at www.crestawards.org/sign-in

Select the project and upload a sample of the students' workbooks or other project evidence.

Check the participating students have met each of the criteria on the teacher assessment page.

Finally, complete the delivery and payment details to order your snazzy certificates.

Congratulations on completing CREST Bronze!

What next?

The scientific discovery doesn't need to end here. Students can have a go at the next level up - CREST Silver.

Don't keep all the fun to yourselves, encourage others to take part in CREST projects and share the wonder of science. For free ideas on how to get started, see www.crestawards.org

STUDENT BRIEF

BRONZE AWARD

Design and make a wooden pendant

In this project your goal is to design and make a wooden pendant necklace for a friend. You will cut and shape wood to make the pendant and look at different ways of colouring it. You will also decide which material to use for the necklace chain.

Getting started

Your friend has asked you to make a wooden pendant that she can wear on a necklace. She would like it to be red and 'teardrop-shaped'. The first thing you need to do is get some wood. Make sure it's easy to cut, and that you can shape it with a file and sandpaper.

Shaping your pendant:

You first need to decide how big you want the pendant to be. Cut off a piece of wood and use a file and sandpaper to make the wood the right shape. You will need to create a hole to put your chain through. You will probably need to use a drill to do this.

Painting the wood:

Before shaping your pendant, you should work out how you're going to paint it. You should test about three or four different methods of colouring. That means you'll need to cut off three or four bits of wood to be coloured.

Choosing the chain:

You need to put your pendant onto a chain. The things you could use include cotton thread, nylon beading thread or elastic. It's up to you which one you choose – you may like to find out which will be the strongest. You could do this by hanging masses from the different threads and seeing which breaks first.

Things to think about

You should think of some different ways of painting the wood:

You might like to try different types of paint - oil, water-based and emulsion, for example.

You could try painting the wood and then covering it with varnish to make it shiny and to protect it.

You could try using nail varnish.

Some people like to see the 'grain' of the wood, so you could also think about using 'washes'. That's when you put a layer of colour onto the wood, but you can still see the wood underneath.

Finally, you could try making your own paint.

Useful resources

Making your own paint is easy – do an online search to find out more!



STUDENT BRIEF

BRONZE AWARD



Health and Safety

A science project work is both dynamic and exciting but can also carry some risk. To avoid any accidents, make sure you stick to the following health and safety guidelines before getting started:

- find out if any of the materials, equipment or methods are hazardous;
- assess the risks (think about what could go wrong and how serious it might be);
- decide what you need to do to reduce any risks (such as wearing personal protective equipment, knowing how to deal with emergencies and so on);
- make sure your teacher agrees with your plan and risk assessment.

Be careful, some of the substances used to make paint are hazardous and some sources of information on the internet are unreliable. Make sure you ask for assistance when using any cutting tools. Some materials can store a lot of energy when they stretch and can whip dangerously when they break. Make sure you wear eye protection. Think about how to keep people's feet out of the way of falling weights.

Remember!

Science isn't just about data. The most successful projects will demonstrate good communication skills and show original ideas that address a real-world problem.

Look at the world around you and consider all the innovative ways that you could address the challenge. Even if things go wrong, use this to show what you have learned. Don't forget to use the student profile form to help structure your project.