

# **UniSA STEM Showdown**

Presented by UniSA Education Futures

## DON'T BUG ME

### Name:\_

The STEM Showdown is a series of STEM challenges to solve by the end of the season. You can complete the tasks individually or in small groups (up to 3 people). Make sure you write all the names of the people in your group above. The student with the most tasks completed over the season will be crowned the UniSA STEM Showdown Champion. Good Luck.

#### Don't bug me

Insects and animals are very interesting, they all have different colours, shapes and sizes which enable them to adapt to their life, to defend themselves some even produce toxins. Today you will need to determine which animals have toxin levels within the range required to test a new anti venom being developed.

#### Your Task

- Choose an animal, it will be labelled with the scientific name that scientists use
- Use the ID chart supplied to determine the common name of the animal. This diagram may help when using the identification chart.



- Once you know the common name of the animal from the identification nchart use the toxicity table supplied to determine the toxicity level of your animal
- Find animals that have a combined toxicity range between 124 and 139.

Fill in this chart as you find your animals

Scientific Name	Common Name	Toxicity level

Which animals have you used to reach the toxicity range between 124 and 139?

Common Name	Toxicity Level
Total toxicity	



University of South Australia Draw your most toxic animal

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STEM Showdown Umpire Comments	Completed (STEM Showdown Umpire to sign)

#### **Extension task**

Once you have completed the task you can try the extension activity.

Museums pin animals out so we can learn about their structures.



Today you can create your own museum piece.

#### You will need

- An insect or arachnid
- Small piece of plasticine or polystyrene ball
- Piece of polystyrene foam
- Pins

#### Instructions

- 1. Sit the specimen on your plasticine or a polystyrene ball to raise it off the foam.
- 2. Place a pin through the abdomen and the polystyrene ball and attach it to the foam.
- 3. Slowly and carefully use a pin to stretch legs into a life like position and then use the pins to hold the legs in position. Make your insect look as life like as possible
- 4. Leave your specimen to dry. The pins can be removed once it is dry.
- 5. If you want to hold your specimen be careful it will be fragile.

STEM Showdown Umpire Comments	Completed (STEM Showdown Umpire to sign)

# Make sure you hand up your signed sheet to the umpire at the end of the session to have your points allocated to the leaderboard



