

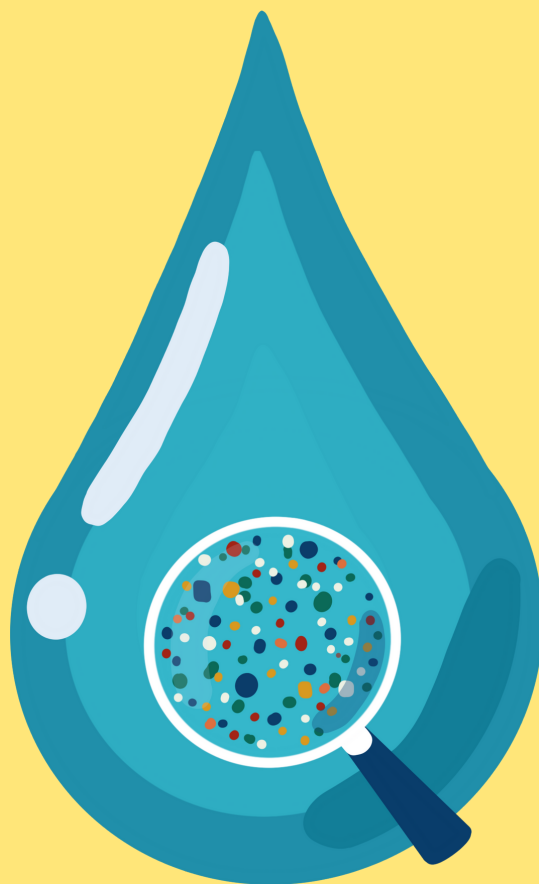


NEW SOUTH WALES

SECONDARY ACTIVITY

# MICROPLASTICS

- Syllabus Reference
- Resources
- Activities



[beachsafetyhub.org.au](https://beachsafetyhub.org.au)

# OUTCOMES & EXPERIMENT

## OUTCOMES

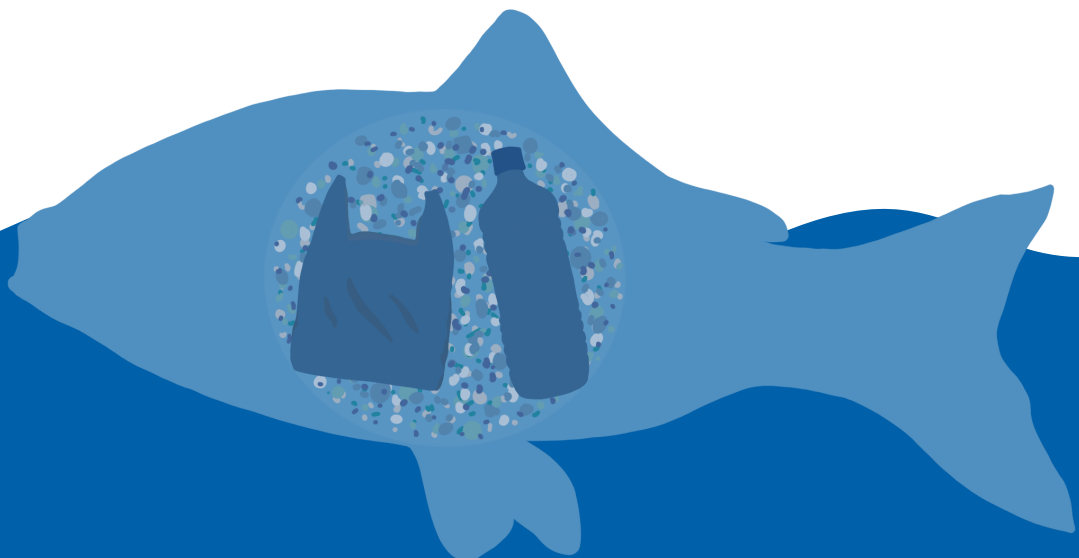
- Follows a sequence of instructions to safely undertake a range of investigation types, collaboratively and individually **SC4-6WS**
- Mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques. **(ACSSU113) SC4-3CW**

## EXPERIMENT

- Extraction of Microplastics from exfoliator

## AIM

- To extract microplastics from an facial exfoliator



# MATERIALS & METHOD

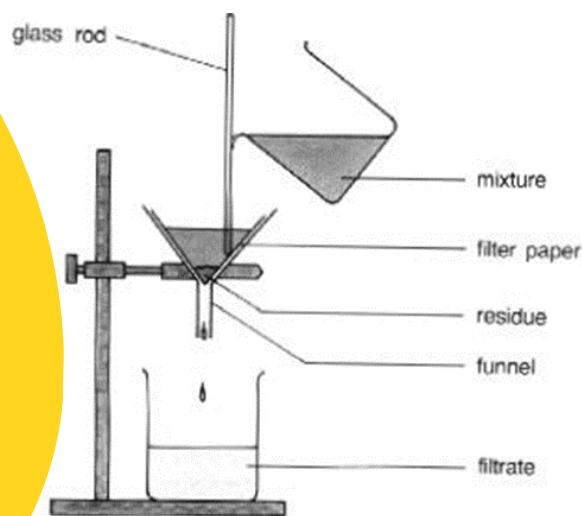
## MATERIALS:

- Exfoliator
- Filter paper
- Funnel
- Water
- 2 x 250mL Beakers
- Retort stand
- Filter ring
- Mass balance
- Plastic Spoon
- Stirring Rod



## METHOD:

1. Record the mass of the empty plastic spoon
2. Fill the spoon with exfoliator
3. Record the mass of the spoon plus exfoliator
4. Fill the beakers with 100 mL of water and dissolve the exfoliator into the water by stirring the spoon in the water
5. Record the mass of a piece of filter paper
6. Set up equipment as shown
7. Filter the water exfoliator mixture rinsing the initial beaker as needed
8. Dry the filter paper overnight



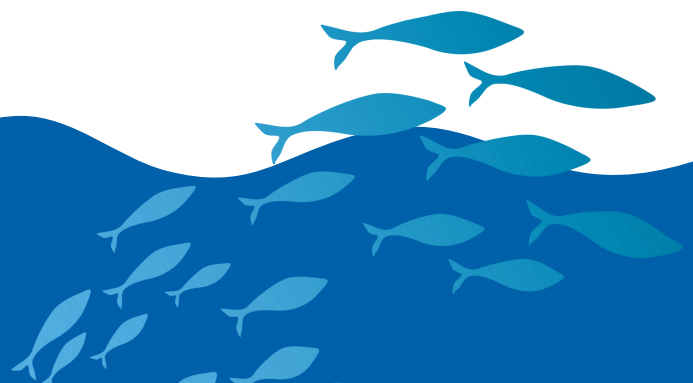
# RESULTS & DISCUSSION

## RESULTS:

Object	Mass (g)
Plastic Spoon	
Plastic Spoon + Exfoliator	
Exfoliator Mass (Plastic spoon + Exfoliator - Plastic Spoon)	
Filter paper	
Filter paper + microbeads	
Microbeads Mass (Filter paper + microbeads - filter paper)	

## DISCUSSION:

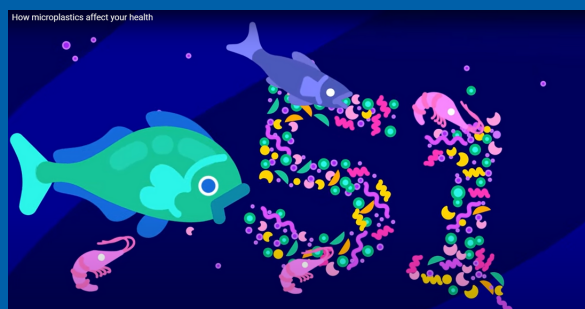
1. What mass of microbeads is being washed down the sink by someone using one spoonful of facial exfoliator to wash their face each day?
2. Explain the effects of microplastics on the marine ecosystem.
3. How could the properties of microplastics be used to prevent them from entering marine ecosystems?
4. Calculate the mass of microbeads in one container of exfoliator



# ADDITIONAL RESOURCES

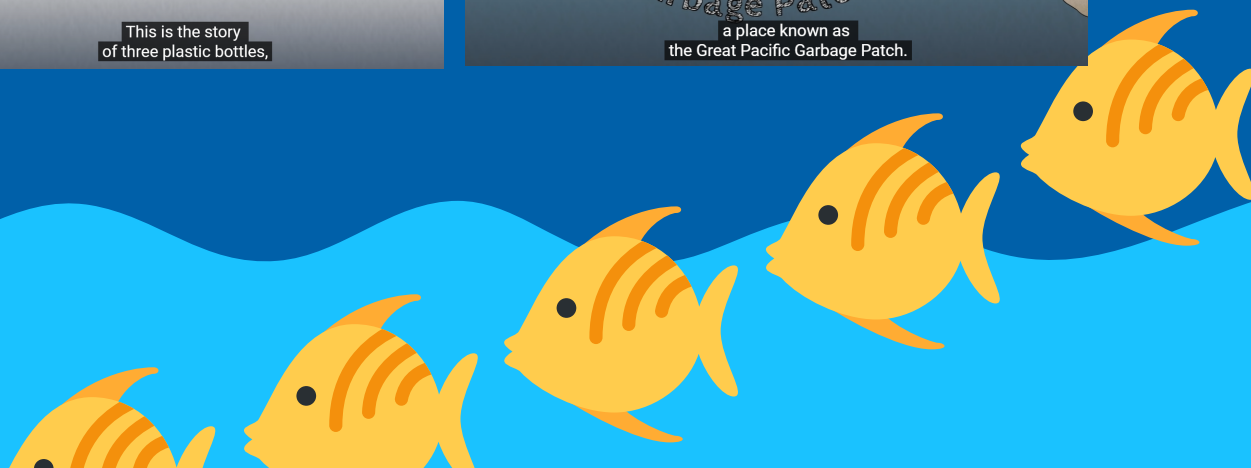
WATCH THE VIDEO

## HOW MICROPLASTICS AFFECT YOUR HEALTH



WATCH THE VIDEO

## WHAT REALLY HAPPENS TO THE PLASTIC YOU THROW AWAY - EMMA BRYCE

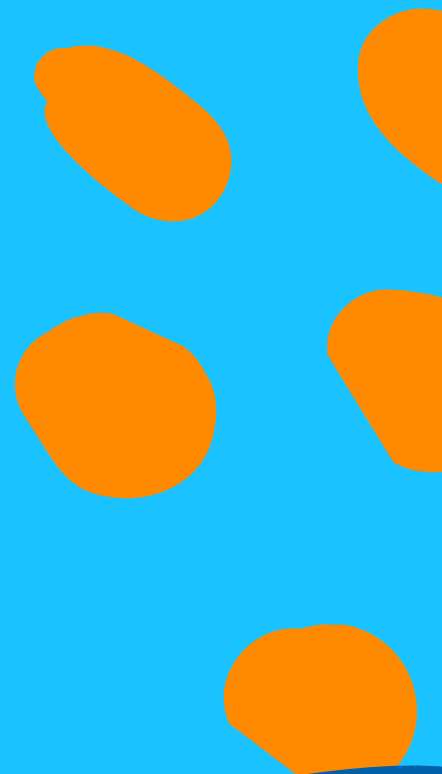




NEW SOUTH  
WALES



**CHECK OUT MORE  
SECONDARY  
TEACHER  
RESOURCES ON  
OUR HUB!**



[beachsafetyhub.org.au](https://beachsafetyhub.org.au)