## Science Detectives

Take on the role of a detective and discover the world of Science. From digging deep to discover dinosaur bones, to observing colour change in flowers, to freezing and melting solids to sinking and floating sultanas in lemonade.

This pack is part of a growing bundle of Project Packs. I created this resource for the members of the Project PLAY membership as a tool to support them with daily PLAY in their homes.

In this resource you will find:

- 4 x Science Experiments
- A series of printable resources from walls that teach displays (word wall) to table learning resources to create a
  dramatic PLAY Science Lab (desk cards).
  - A weekly PLAY Planner to plan out the week using these resources.

Our PLAY ideas in this pack are nothing new, they are simple, quick and easy play ideas to boost Science concepts, explore imaginative play (when set up as a dramatic PLAY centre) and help with nurturing the flow of PLAY (by having a project to investigate over time).

I hope this resource is helpful when boosting daily play and nurturing the flow of PLAY in your home.

leil xx

All PLAY activities shared by celebratePLAY & Project PLAY require adult supervision at all times.





## Science Detectives

project pack - toddlers and preschoolers

about erin

Hi there!! I'm Erin, teacher (EC and Primary), Mum (of 2), wife, smoothie obsessed, organisational nerd and soon to be your greatest PLAYmate...the one that will share:

- play ideas with you
- the one that will support you in creating play systems and play spaces that fit YOUR life
- the playmate that will celebrate the PLAY wins with YOU and
- the one that will empower YOU to totally rock this motherhood PLAY gig thing it's a REAL \*thing\*



Thank you for becoming our newest, greatest PLAYmate by joining the Project PLAY membership.

This Project Pack is for personal use only and is not to be sold, shared, redistributed in any form. If you love this pack as much as we do and would like your family and friends to have their own copy, please refer them to our website to join Project PLAY https://celebrateplay.com.au/project-play/

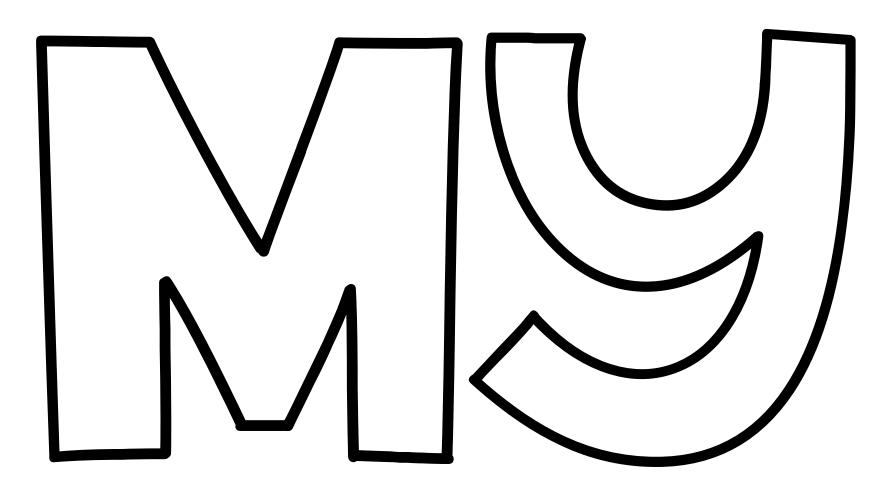
### Follow us on the socials

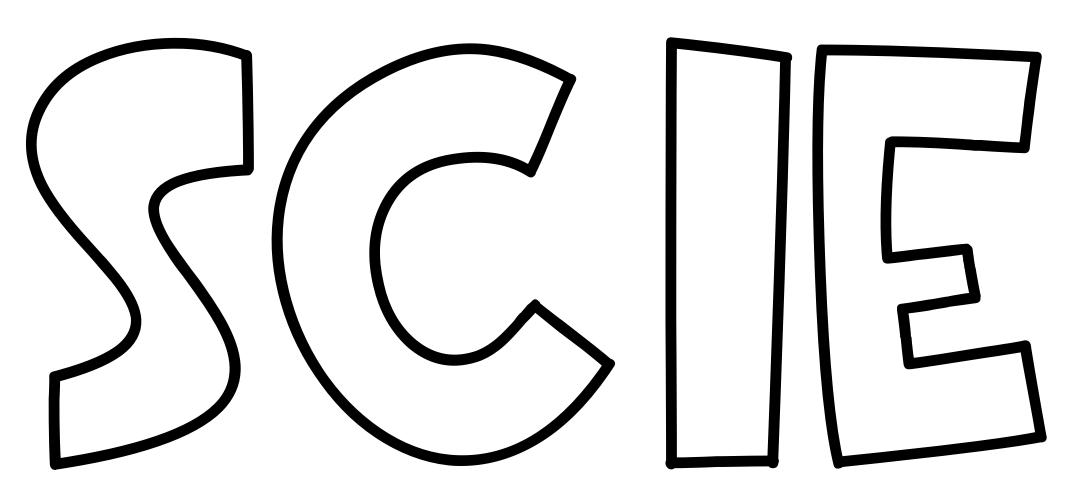
shop - www.celebrateplay.com.au/shop

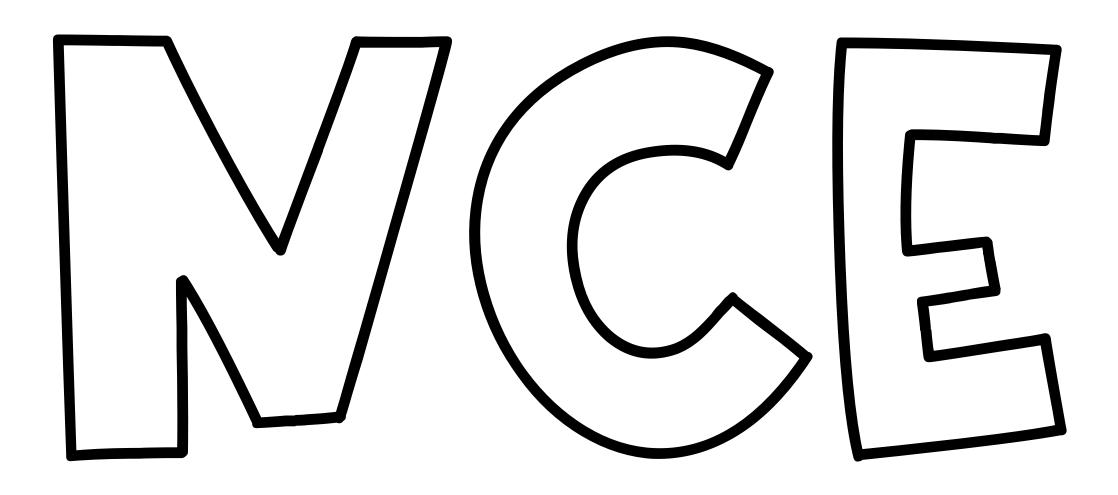
Happy Playing!!

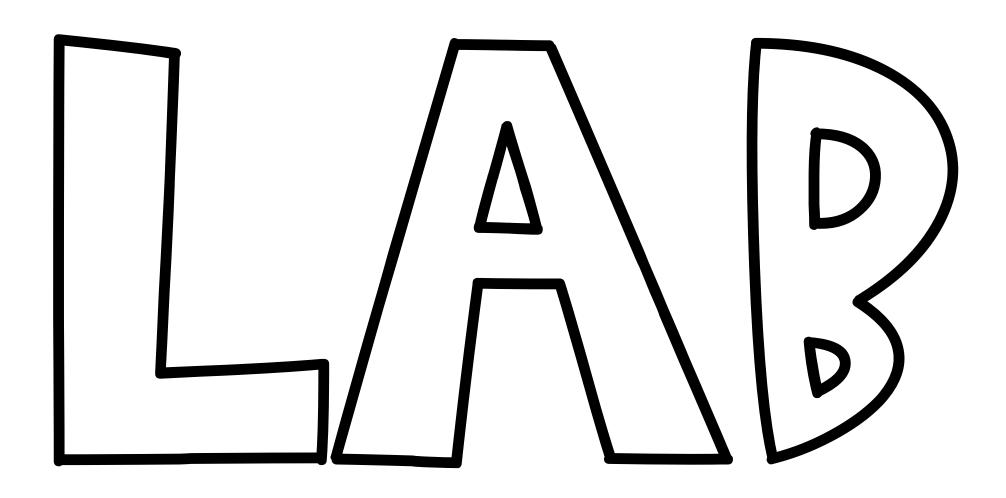


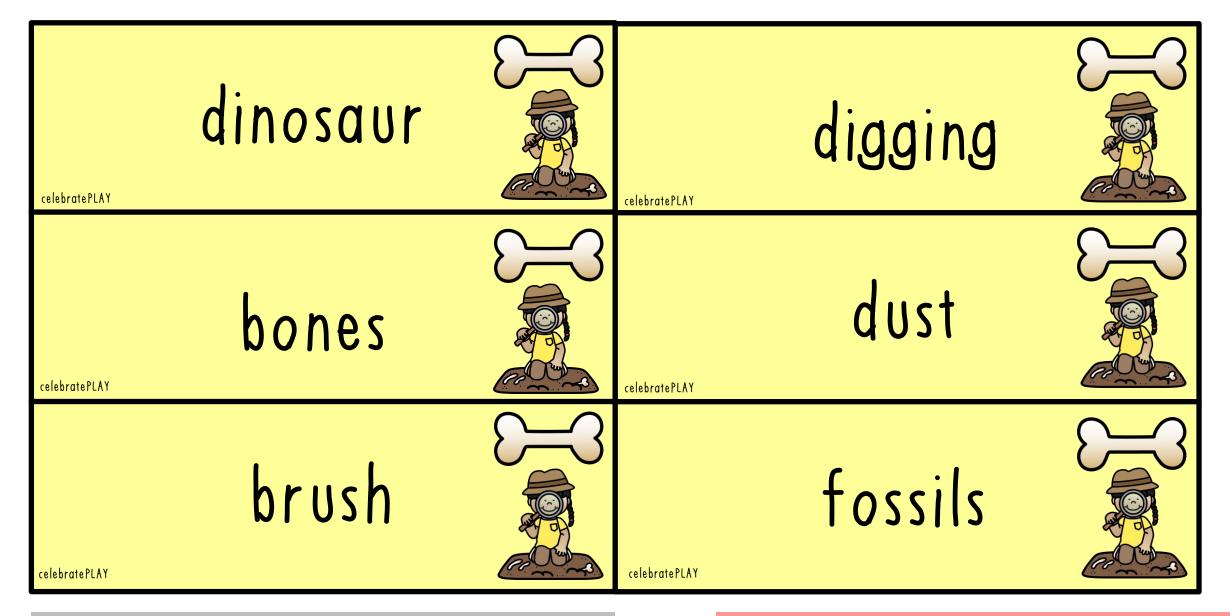




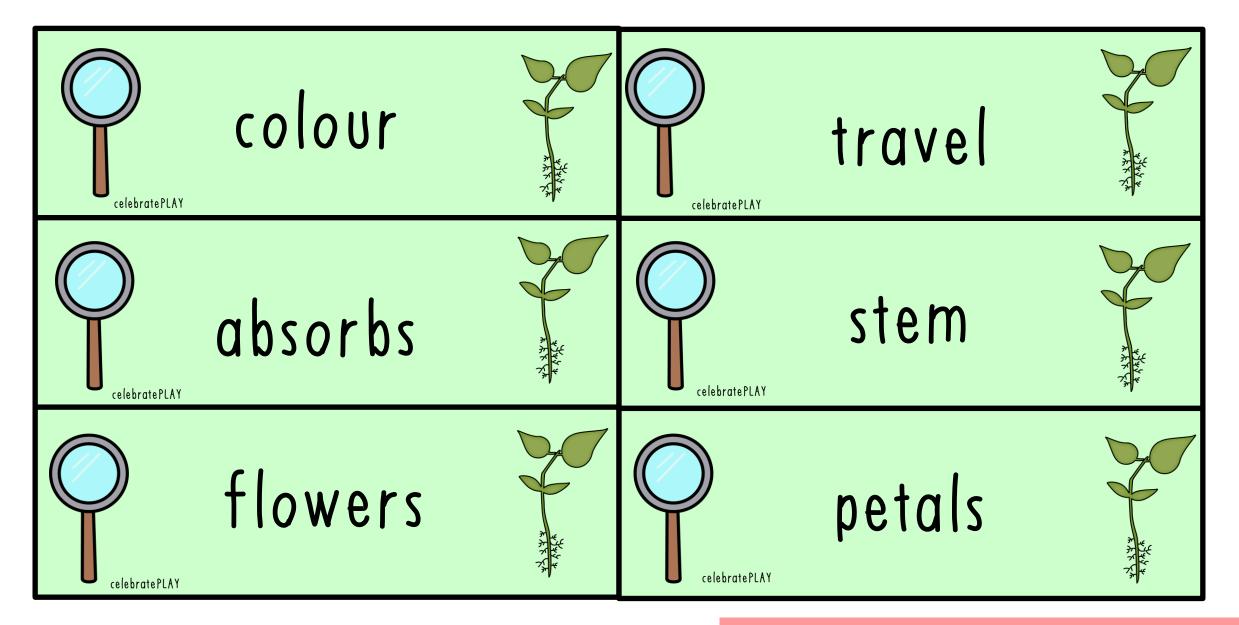




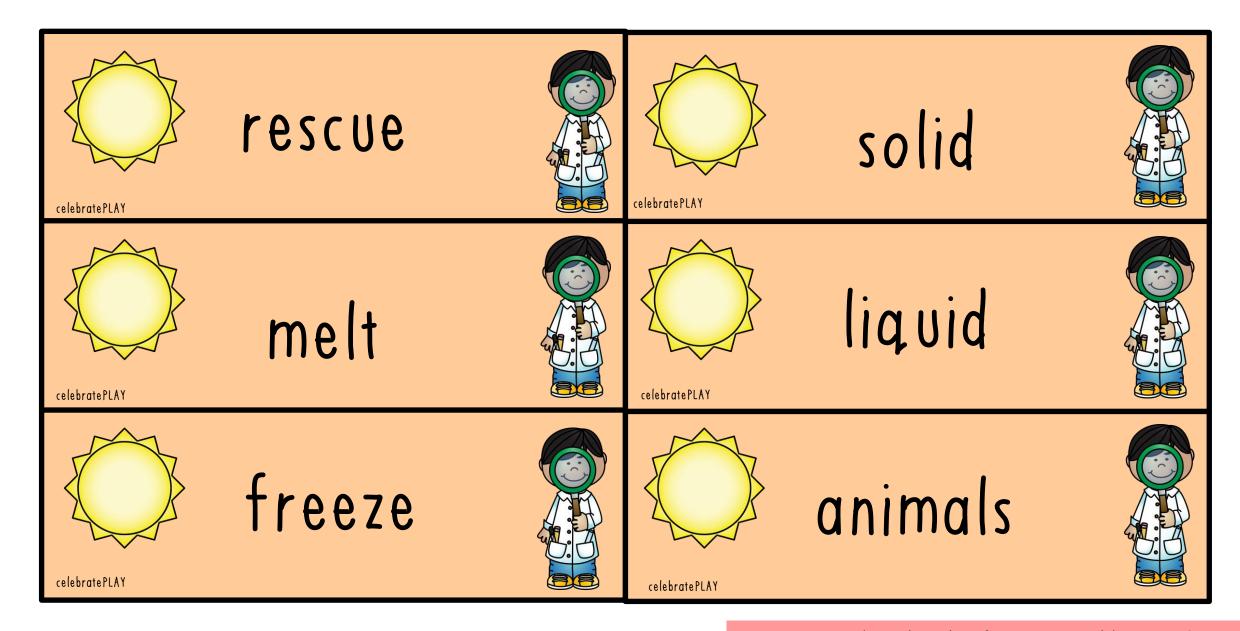




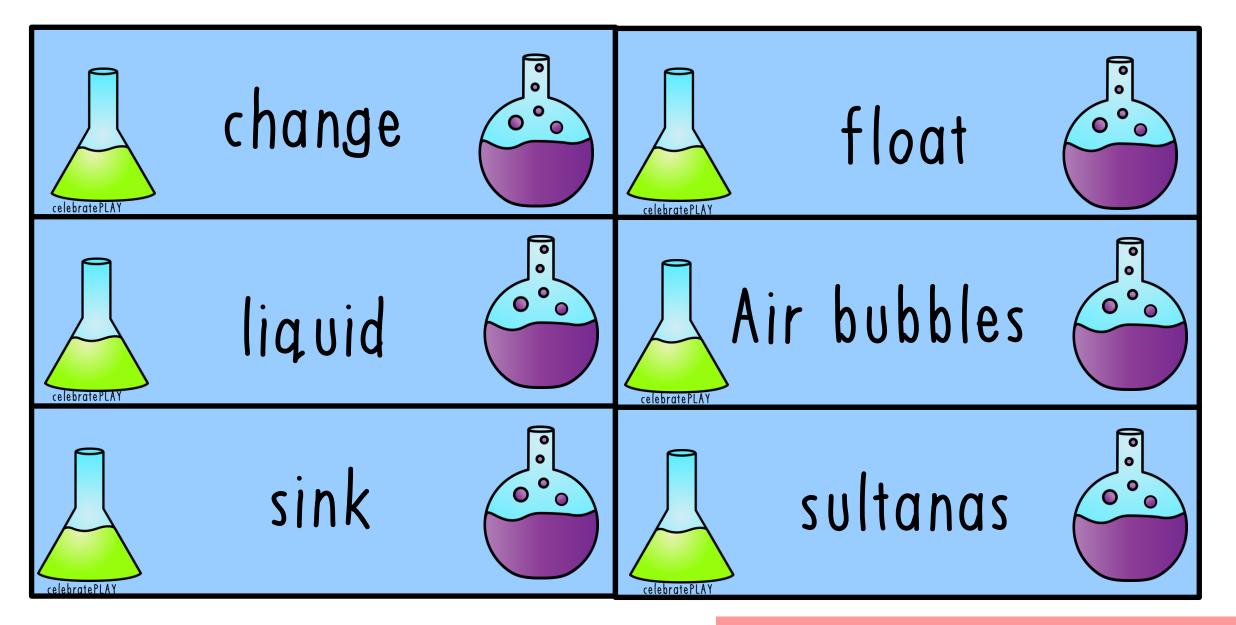
Dinosaur Dig Play Tray Word Wall and/or Desk Cards



Colour Changing Flowers Experiment Word Wall and/or Desk Cards

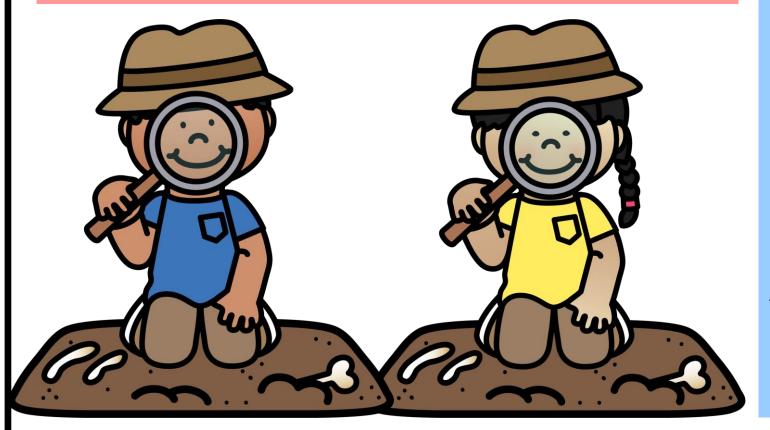


Rescue the frozen animals freeze and melt Experiment Word Wall and/or Desk Cards



Sultanas in Lemonade Experiment Word Wall and/or Desk Cards

## Dinosaur Dig PLAY Tray



### You will need:

- Play tray
- Taste safe sensory base eg chocolate soil
- Dinosaur figurines and/or dinosaur bones
  - Wide Paintbrushes
  - Magnifying Glass
  - Mini spoon/shovel/spade
    - Papertowel or tissues

### METHOD

- 1. Place the taste safe sensory base in the Play Tray.
- 2. Drop the dinosaur figurines and/or dinosaur bones into the taste safe sensory base.
- 3. Use the mini spoon/shovel/spade to dig and scoop up the dinosaur figurines and/or bones.
- 4. Use the paintbrush to dust off the sensory base and place dinosaur figurines and/or bones onto the paper towel/tissue.
- 5. Discuss the finds (use magnifying glass) and refer to word wall/desk cards
  - 6. Display the finds on a shelf.
- 7. Take photos of the finds and celebrate the moment.



### You will need:

- 4-6 glasses or plastic clear cups
  - Water
  - Food Colouring
- 4-6 white petal flowers (one per cup)

### METHOD

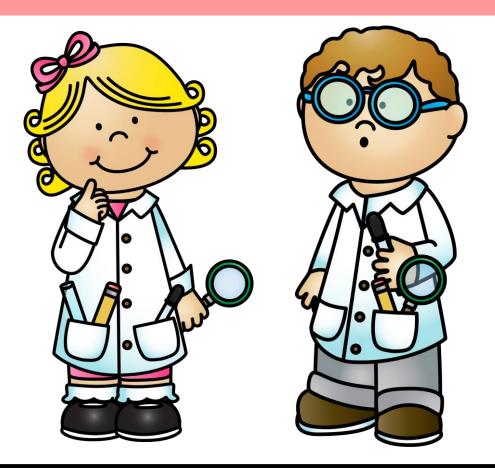
- 1. Pour water into each cup to the halfway mark.
- 2. Drip a few drops of food colouring (variety of colours) into the water and stir so the colour spreads.
  - 3. Place one flower in each cup of water.
- 4. Take photos of the flowers each day and observe the colour changes.
  - 5. Discuss the colour changes, refer to the word wall/desk cards and hang up the photos.
    - 6. Celebrate the moment.

# Colour Changing Flowers Experiment





# Rescue the frozen animal



### You will need:

- lce cube or cup cake tray
  - Animal figurines
- Water(cold and warm)
- Spray Bottle or pippettes
  - Magnifying Glass
- Papertowel or tea towel

### METHOD

- 1. Place the animal figurines into the tray.
- 2. Cover with cold water and place into the freezer.
- 3. Talk about the liquid to solid freezing process in simple terms.
- 4. Once fully frozen, remove to begin the melting process.
- 5. Use the spray bottle and/or pipettes with warm water and melt the ice cubes to recuse the animals.
- 6. Continue to melt the ice cubes until the animals are free.
  - Discuss the melting process in simple terms and refer to the word wall and/or desk cards.
  - 8. Take photos of the process and celebrate the moment.



### You will need:

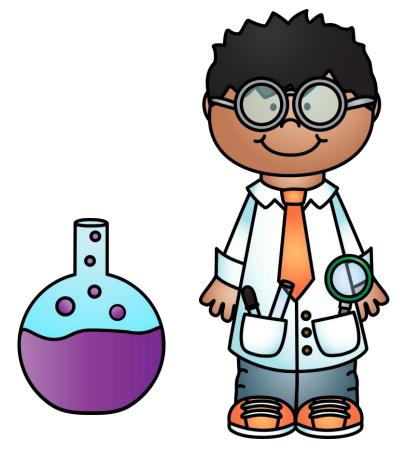
1 glass or plastic clear cup

- Lemonade
- Sultanas

### METHOD

- 1. Pour lemonade into the glass/cup to the halfway mark.
  - 2. Drop a few sultanas into the lemonade.
- 3. Observe the sultanas and describe what they are doing eg, sultanas are collecting air bubbles from the top. When they sink the air bubbles begin to disappear and the sultana then floats back up to collect more air bubbles.
- 4. Refer to the word wall/desk cards during the discussion.
  - 5. Take photos and celebrate the moment!

# Sultanas in Lemonade Experiment





## Weekly PLAY Planner



Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning						
Afternoon						
Evening						

project pack - toddlers and preschoolers

## Science Detectives

thank you to the following artists

Graphics and Fonts used: pb strnymocha, KG Blank Space Sketch, JR Skinny Pete and PondFreeMe











lein xx

All PLAY activities shared by celebratePLAY & Project PLAY require adult supervision at all times.