

Learning from Home – Brooke Avenue Public School Stage 3 (Years 5 and 6) – Week 9, Term 3

The following timetable can be used by students to support learning at home. All tasks have been linked to syllabus outcomes. If technology is available at home, please use the attached links to support learning.

Monday 6th September 2021

When you see the  symbol, upload that task to Seesaw for your teacher to give feedback.

English

Spelling: Multisyllabic Words Revision

Choose 10 of the words below and copy them as your spelling list. Be careful to copy them correctly.

sensational	library	exhausted	indigenous	necessary
tremendous	discombobulated	fantastic	monotonous	insipid
impromptu	salutations	reminisce	celebrate	interpretation
investigate	responsibility	inconspicuous	resolution	syllabification

What is syllable division?

Syllable division rules show us how to break up a multi-syllable word into its syllable parts. There are six main syllable division rules to guide us.

How is it done?

- It all starts with the vowels. Find the vowels in the word. It helps to underline or highlight them. (a,e,i,o,u)
- Find the patten of the consonants and vowels (VCV, VCCV, VCCCV, VCCCCV, C+le, VV).
- Use the syllable division rule (shown below) to divide the word into its syllable parts.

Your Task

Break your chosen spelling words up into their syllables, using the rules to help you.

Syllable Division Rules

<p><small>VCCV</small></p> <p style="font-size: 2em; font-weight: bold; margin: 0;">basket</p> <p style="font-size: 0.8em; margin: 0;">v c c v</p> <p style="font-size: 0.7em; margin: 0;">Divide between two middle consonants.</p>	<p><small>VCV</small></p> <p style="font-size: 2em; font-weight: bold; margin: 0;">cabin</p> <p style="font-size: 0.8em; margin: 0;">v c v</p> <p style="font-size: 0.7em; margin: 0;">Divide after the consonant when the 1st vowel has a short sound.</p>
<p><small>VCV</small></p> <p style="font-size: 2em; font-weight: bold; margin: 0;">basic</p> <p style="font-size: 0.8em; margin: 0;">v c v</p> <p style="font-size: 0.7em; margin: 0;">Divide before the consonant when the 1st vowel is long.</p>	<p><small>C+LE</small></p> <p style="font-size: 2em; font-weight: bold; margin: 0;">candle</p> <p style="font-size: 0.8em; margin: 0;">v c c l e</p> <p style="font-size: 0.7em; margin: 0;">Divide before consonant -le</p>
<p><small>VCCCV</small></p> <p style="font-size: 2em; font-weight: bold; margin: 0;">complex</p> <p style="font-size: 0.8em; margin: 0;">v c c c v</p> <p style="font-size: 0.7em; margin: 0;">With 3 consonants between vowels, usually split after 1st consonant (but keep digraphs and blends together.)</p>	<p><small>VCCCV</small></p> <p style="font-size: 2em; font-weight: bold; margin: 0;">instruct</p> <p style="font-size: 0.8em; margin: 0;">v c c c v</p> <p style="font-size: 0.7em; margin: 0;">With 4 consonants between vowels, usually split after 1st consonant.</p>
<p style="font-size: 2em; font-weight: bold; margin: 0;">windmill</p> <p style="font-size: 0.8em; margin: 0;">v c c m i l l</p> <p style="font-size: 0.7em; margin: 0;">Divide compound words between the two words.</p>	<p style="font-size: 2em; font-weight: bold; margin: 0;">unkindly</p> <p style="font-size: 0.8em; margin: 0;">v c c n d l y</p> <p style="font-size: 0.7em; margin: 0;">Divide syllables before a suffix and after a prefix.</p>



Grammar: Synonyms and Antonyms

Watch the video "Antonyms and Synonyms": <https://youtu.be/bBWm3-mxL1U>

Write in your own words an explanation of what the difference is between a synonym and an antonym, and what are at least three examples of each?

The difference between a synonym and antonym is: _____.

My three examples are:

1.

2.

3.

Reading: How 3D Cinema Works

Read the attached text and answer the following questions.

1. How are 3D movies different from normal movies?

2. Why does a 3D camera have two recording devices?

3. What might future 3D cinema seats do?

4. True or False, Films not projected an eye-width apart would not be used for 3D cinemas?

5. In which part of the library would you find this text?

6. How many films are projected onto a 3D camera?

7. If someone is blind in one eye, how would 3D cinema look to them?

Writing: Power Writing

Power writing can be an effective strategy for building writing fluency. The whole process from start to finish takes less than 5 minutes.

- Think about the topic of the day for 1 minute.
- Set a timer/stopwatch for 3 minutes and write about the topic non-stop.
- After the timer goes off, you now have 1 minute to edit or add to your writing. (The editing step is done in a different coloured pen/ pencil).
- The final step is to graph how many words you wrote and reflect on your progress. Count the number of words you wrote and colour in the graph for the corresponding day.

Monday Topic: The Dentist

Break – Time to stop and refuel. Eat, play, have fun. Self-directed outside activities where possible.

Maths: Chance

What is chance?

Brainstorm words and make a *mind map* associated with chance - the likelihood of something happening.



| NSW Department of Education

Watch the "What is Chance" clip here: <https://youtu.be/xGQO0RTgK1I>

2. Draw a scale like this one

0 _____ 1

a) Label the scale with chance words: impossible, certain, unlikely, likely, even chance etc.

b) Fill in the table below with events that fit into each category. E.g. 'tomorrow will be Tuesday' (certain)

Likelihood	Event 1	Event 2	Event 3
Impossible			
Unlikely			
Even chance			
Likely			
Certain			

c) Draw a bigger scale and plot all of your events from the table along it

0 _____ 1

Break – Time to stop and refuel. Eat, play, have fun. Self-directed outside activities where possible.



Welcome to CAMP BAPS!

Your teachers are very aware that you are all disappointed we cannot attend camp this year and for many of you, you missed out last year too. We were also looking forward to sharing the camp experience with you and completely understand your disappointment. So, we thought this week we will be participating in all things CAMP and we will do our best to have as much fun as we possibly can!

Covid can take the kids out of the camp, but it can't take the camp out of the kids!

Each afternoon this week, there will be camp based activities. Your teachers are really excited to see what you share with us.

Activity 1

First things first, you need to choose your fellow campers in your room (this is who you would have liked to have been roomed with). Choose a name for your cabin (appropriate of course!) and create a flag, too! This flag needs to be inspirational, fun, bright, show who is in your cabin and what you're most looking forward to during camp week!

Activity 2

You would have witnessed your fearless camp leader give you an introduction to camp life and show one of the activities that would have been happening at camp (those water rapids were WILD!). From the list below, choose an activity to re-create and re-enact. Remember you don't have to ACTUALLY do the activity. Safety first always!

- Archery
- Bushcraft
- Bushwalking
- Canoeing
- Flying fox
- Fencing
- Fossiling
- Giant Swing
- High Ropes
- Rock climbing
- Sailing
- Orienteering



- Kayaking

Activity 3

Have a look at the camp Seesaw activity your teachers have shared and listen to a camp story or two. Today has been a blast. Get some shut eye- and we'll see you tomorrow, fellow campers!

Tuesday 7th September 2021

When you see the  symbol, upload that task to Seesaw for your teacher to give feedback.

English

Spelling:

Look, cover, write, check your spelling list. Choose an activity from the Spelling Choice Board and complete it.

Grammar: Synonyms and Antonyms

Complete the attached worksheet.

Reading: Designing Logos

Read the attached text and answer the following questions.

1. Where do companies display their logos?
2. How should logos look?
3. What is the second thing a designer should decide?
4. What does even a simple logo need?
5. Why would green be a good colour for a company that runs rainforest tours?
6. What type of text is this?

7. What is paragraph 4 mainly about?

Writing: Power Writing

Power writing can be an effective strategy for building writing fluency. The whole process from start to finish takes less than 5 minutes.

- Think about the topic of the day for 1 minute.
- Set a timer/stopwatch for 3 minutes and write about the topic non-stop.
- After the timer goes off, you now have 1 minute to edit or add to your writing. (The editing step is done in a different coloured pen/ pencil).
- The final step is to graph how many words you wrote and reflect on your progress. Count the number of words you wrote and colour in the graph for the corresponding day.

Tuesday Topic: The Worst Smell Ever!

Break – Time to stop and refuel. Eat, play, have fun. Self-directed outside activities where possible.



Maths: Chance

The likelihood of an event happening can also sometimes be expressed as a fraction.

For example, what is the chance of a dice landing on a 4? Well, there are six sides (and 6 numbers) on a dice, so the chance of the dice landing on any one of the numbers 1-6, can be expressed as the fraction $\frac{1}{6}$.

Fractions can also be used to show the chance a dial/hand lands on a particular section of a spinner.



This spinner has 7 sections, so 7 in our fraction will always be our denominator (bottom number).

If the question is: how likely is the spinner to land on the number 5? There is only one number five so it has one chance of landing on the number 5 so the answer as a fraction would be $\frac{1}{7}$.

If the question is: how likely is the spinner to land on light blue? The answer would be $\frac{2}{7}$ as there are two light blue sections.

Watch "Spinner Probability" here: <https://youtu.be/XTRoLSQMn20>

Now complete the two 'Probability Outcomes using Fractions' worksheets attached below.

Break – Time to stop and refuel. Eat, play, have fun. Self-directed outside activities where possible.



CAMP BAPS

Rise and shine fellow campers! What a beautiful day it is! Us teachers were up and down with some of you throughout the night who seemed to be having trouble sleeping... Now we suspect some of you are feeling very tired. This should wake you up!

Activity 1

Today, you need to build yourself a raft using any materials you have at your house. This raft must be able to:

- Hold the weight of an apple
- Float in water
- Made from 3 different materials only (for example: tape, paddlepop sticks, lego)
- You are only allowed to use 30 cm of tape!!

Your raft must float in water (bathtub, sink, bucket, container) for a minimum of 30 seconds whilst the apple is on it. No hands allowed! If your raft does not work the first time you can make changes, but you must stick with 3 materials only! Share a video of your raft (hopefully floating) with your teacher on Seesaw.

See the examples below for some ideas.



Activity 2

To finish off today, sit back, relax and listen to the story around the 'campfire'. Your teacher will share the Seesaw link with you.

Wednesday 8th September 2021

When you see the  symbol, upload that task to Seesaw for your teacher to give feedback.

English

Spelling: Look, cover, write, check your spelling list. Choose an activity from the Spelling Choice Board and complete it.

Grammar: Synonyms and Antonyms

Listen to the story 'The Best Beak in Boonaroo Bay' here: <https://youtu.be/JWRy6MeWuVs>. As you listen, write down all the synonyms used for the word 'said'.



Reading: Bike it

Read the attached text and answer the following questions.

1. How much Co2 do cars produce?
2. When travelling in your local area, what does the author suggest?
3. Where can bikes be taken to keep them safe?
4. True or False, about 35% of people in European cities travel by bike.
5. What is the main purpose of this text?
6. What safety rule is one of the riders in the illustration breaking?
7. Find the word from the text that means: 'Fixed in one spot'

Writing: Power Writing

Power writing can be an effective strategy for building writing fluency. The whole process from start to finish takes less than 5 minutes.

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- After the timer goes off, you now have 1 minute to edit or add to your writing. (The editing step is done in a different coloured pen/ pencil).
- The final step is to graph how many words you wrote and reflect on your progress. Count the number of words you wrote and colour in the graph for the corresponding day.

Wednesday Topic: Donuts

Break – Time to stop and refuel. Eat, play, have fun. Self-directed outside activities where possible.

Maths:

In Week 6 this term, we looked at decimals. We know that numbers less than one whole, can be expressed as a decimal. When we talk about chance, the likelihood of something happening, we can also express this as a decimal.

0 - is the number given to an event that is impossible,
1 - is the number given to an event that is certain and
0.5 - shows an even chance of an event occurring.
Numbers in-between (0.1, 0.2, 0.3, 0.4, 0.6, 0.7, 0.8,
0.9) represent the likelihood of events happening
across the scale and include; likely, unlikely etc.

Now complete the two attached worksheets called *Probability Range 0-1*.

Break – Time to stop and refuel. Eat, play, have fun. Self-directed outside activities where possible.



CAMP BAPS

Activity 1

Check out Seesaw to see the video of Ms Lewis making damper. You will need to pay attention to the steps and take notes (pause at any time!) as you will be writing the procedure (see the proforma attached below) so you can make your own damper. Take photos as you go along. Your written procedure and photos of your final product need to be sent to your teacher on Seesaw. Happy cooking!

Ingredient's list:

- 450g (3 cups) self-raising flour
- Pinch of salt
- 80g butter, chilled, cubed
- 185ml (3/4 cup) water

Whilst your damper is cooking, complete the Camp Photo Challenge.

Activity 2 – Camp Photo Challenge

Take a photo of an object, your yard and your 'tent' and upload them to Seesaw. The idea is to be as creative as possible and make it look like you are really at camp! Selfies are definitely a good option. Do you know how to edit and add backgrounds? Use a green screen? Add in objects (animals for example)? Use any of these skills to help you. We want to see as many of you as possible so make sure you upload these to Seesaw and there will be a prize for the most creative. Happy snapping.

Get some shut eye tonight, Campers. Tomorrow's a big one!

When you see the  symbol, upload that task to Seesaw for your teacher to give feedback.

English

Spelling: Look, cover, write, check your spelling list. Choose an activity from the Spelling Choice Board and complete it.

Grammar: Synonyms and Antonyms



The word 'nice' is banned! Use synonyms to describe this ice cream. Write them below.

Reading: Pony Gymkhana

Read the attached text and answer the following questions.

1. What is gymkhana?
2. What should a good gymkhana pony have?
3. What makes pony's legs stronger?
4. Why is speed important for this game?

5. What are a pony and rider most likely to do just before an event?

6. Which event covers the exact same course 4 times?

7. True or False: Most gymkhana riders are children.

Writing: Power Writing

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- Set a timer/stopwatch for 3 minutes and write about the topic non-stop.
- After the timer goes off, you now have 1 minute to edit or add to your writing. (The editing step is done in a different coloured pen/ pencil).
- The final step is to graph how many words you wrote and reflect on your progress. Count the number of words you wrote and colour in the graph for the corresponding day.

Thursday Topic: Life in Lockdown

Break – Time to stop and refuel. Eat, play, have fun. Self-directed outside activities where possible.



Maths:

Chance of events: Using the number line from the previous lessons where 1 is certain and 0 is impossible, order the likelihood of these events happening onto the number line. This about the language from previous lessons and where they were placed to help you find these. You can also compare the events to one another to help you select where they might go. For example, rolling a 1 on a dice (1 out of 6) is less likely than getting a heads when flipping a coin (1 out of 2), so it will be closer to 1 than rolling a dice.

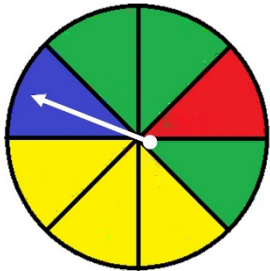
Events:

- Regular 6-sided dice - Rolling an even number, rolling a number greater than 6, rolling a 2 twice in a row.
- Picking cards at random from a deck of 52 cards with 4 suits – Picking a heart card, picking a king card, picking the ace of spades, picking any number card.
- Picking letters randomly from a bag with each letter of the alphabet - Picking a vowel, picking a consonant, picking a letter from your first name, picking a letter from your last name.

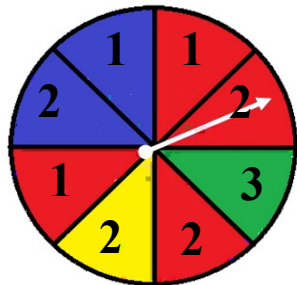
0 _____ 1

Write out all the possible outcomes for these events. Using fractions show what the probability of each event is.
Example: Regular dice being rolled – Outcome = 1, 2, 3, 4, 5 and 6 the chance of each is $\frac{1}{6}$

1. Write all possible outcome for this spinner and using fractions, give the probability of each outcome.



2. Write all possible outcome for this spinner and using fractions give the probability of each outcome. (Think about outcomes that could be numbers, colours or numbers and colours. This can have a lot of outcomes)



Break – Time to stop and refuel. Eat, play, have fun. Self-directed outside activities where possible.



CAMP BAPS

Activity 1

Today, it's your turn to be camp leader! LEARNING FROM HOME CAMP LEADER!

Your task is to create a camp activity that can be done at home. Film yourself or write it down to explain the activity, what you need and how it works. Remember, you're the camp leader so you need to be motivational and FUN. Your job is to encourage people to participate in this activity. Be creative and have fun! You may wish to experiment with apps like Imovie or Seesaw to see what you can create. If you are choosing to write your camp activity, come up with a poster with your explanation on it.

Activity 2

Writing – Dream Tent

Watch this YouTube clip of Harry Potter stepping into the magic tent: <https://youtu.be/lb2U2ArNECc>

Now, imagine the simple, brown, small tent is yours BUT when you step into the tent it turns into a tent of your dreams. Use the story starter below to write about what you see, feel and hear when you step into your dream tent.

As I reached my camping destination, it was dark but through the beam of my torchlight I could see my tent. It was so small and it did not look very sturdy. It certainly did not look like it could sleep 6 people. However, when I peeked into the tent...

| NSW Department of Education

Tomorrow we will be having our Zoom meetings from your camping 'tents'. This may be a cubby you have built in your bedroom, under the dining table or in the backyard. If you are using blankets or sheets, please check with your families that it's okay to use them. Get your PJs ready, your hot chocolate made, and we'll see you tomorrow for Camp Zoom.

Friday 10th September 2021

When you see the  symbol, upload that task to Seesaw for your teacher to give feedback.

English

Spelling: Look, cover, write, check your spelling list one final time before testing yourself. How did you go?

Grammar: Synonyms and Antonyms

Complete the attached quiz.

Reading: Mighty Dragons

Read the attached text and answer the following questions.

1. Which climate do Komodo dragons like best?
2. Why is the dragon's mouth deadly?
3. What happens soon after the young are born?
4. What is the local name for the Komodo dragon?
5. True or False: Komodo dragons are warm blooded.
6. Name something cool about Komodo dragons.
7. Find the word in the text that means: 'something that is poisonous.'



Writing: Power Writing

Power writing can be an effective strategy for building writing fluency. The whole process from start to finish takes less than 5 minutes.

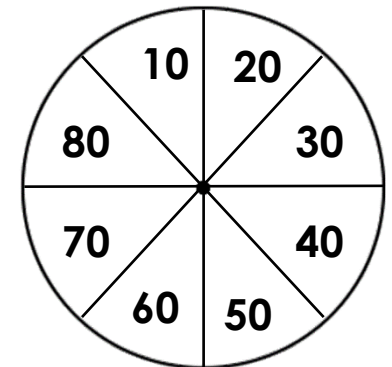
- Think about the topic of the day for 1 minute.
- Set a timer/stopwatch for 3 minutes and write about the topic non-stop.
- After the timer goes off, you now have 1 minute to edit or add to your writing. (The editing step is done in a different coloured pen/ pencil).
- The final step is to graph how many words you wrote and reflect on your progress. Count the number of words you wrote and colour in the graph for the corresponding day.

Friday Topic: Breakfast, Lunch or Dinner? What's your favourite and why?

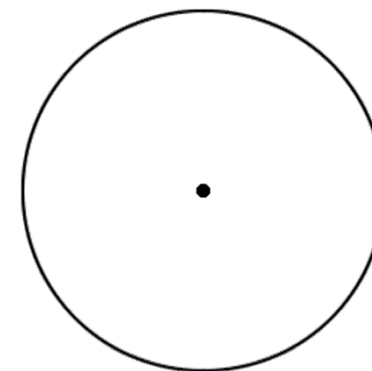
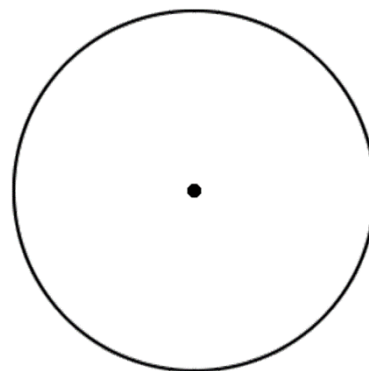
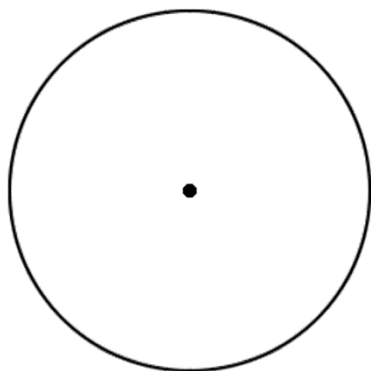
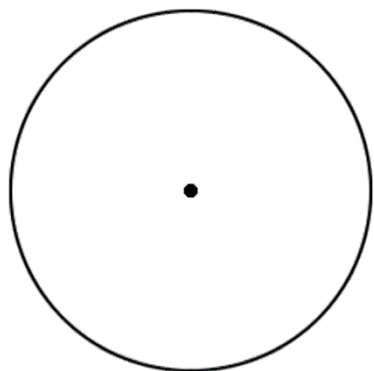
Break – Time to stop and refuel. Eat, play, have fun. Self-directed outside activities where possible.

Maths:

Create the following spinners to match the probability of each event happening. For example, make a spinner, so that when spun it is certain to land on a number higher than 6. You could make its numbers count by 10s. Then every roll gives you a number higher than 6.



1. Make a spinner, so that when spun it has a $\frac{3}{8}$ chance landing on blue and a $\frac{4}{8}$ chance of landing on green and a $\frac{1}{8}$ chance of landing on red.
2. Make a spinner, so that when spun it has a certain chance of landing on a primary colour but an even chance of landing on odd or even numbers.
3. Make a spinner, so that when spun it is impossible to land on a number greater than 6, a $\frac{1}{3}$ chance of landing on green and a $\frac{1}{6}$ chance of landing on 4.
4. Make a spinner, so that when spun it is certain to land on a number lower than 1 but has a $\frac{1}{6}$ chance of landing on a different number each time.



Break – Time to stop and refuel. Eat, play, have fun. Self-directed outside activities where possible.



CAMP BAPS

What a week it's been, fellow campers! I imagine you are all as exhausted as your Camp Leader. So today, **there is one task, and one task only**. To get in your tent or cubby, have your class Zoom meeting from there, reflect on your favourite things that have happened this week and have a wellbeing catch up. Thanks for an amazing Camp Week everyone. Signing out...

SPELLING Choice Board

NAME:

Directions: Start by completing one MUST DO activity. Then, you will do three CHOICE activities. Your CHOICE activities must be in 3 separate categories.

MUST DO

Write down the dictionary definition each word.

and

Use the syllable division rule (attached) to divide the word into its syllable parts.



CHOICE

ART *smart*

Bubble Words- Write each word in bubble letters.

WORD *smart*

Rate the Words- Put the words in order from easiest to hardest to spell.

SELF *smart*

Type It Out- Type each word using a different font.

BODY *smart*

Opposite Hand- Write your spelling words with your opposite hand.

PEOPLE *smart*

Have someone quiz you on your words. Write out the words you miss 3X

LOGIC *smart*

Word Puzzle- Connect your spelling words to each other, crossword puzzle style.

MUSIC *smart*

Rhyme Time- Write each spelling word and a word that rhymes next to it.

NATURE *smart*

Sort-a-Word- Sort the words by noun, verb, or adjective.

_____’s Power Writing Graph

75					
70					
65					
60					
55					
50					
45					
40					
35					
30					
25					
20					
15					
10					
5					
	Monday	Tuesday	Wednesday	Thursday	Friday

Review: Synonyms and Antonyms

1. Draw a line to match each word to its **synonym** (a word with the same or similar meaning) and **antonym** (a word with the opposite meaning).

Word	Synonym	Antonym
assemble	funny	trivial
anxious	slow	humorless
hilarious	build	rapid
scorching	nervous	demolish
sluggish	important	frigid
significant	hot	fearless

2. Write three **synonyms** for each of the words below.

good	fantastic		
happy			
dark			

3. Fill in the blanks with **antonyms** of the italicized words to complete the story.

On Wednesday, Henry arrived at school and discovered it was opposite day! Everything in his classroom was totally (*normal*) **wacky**. All the lights were (*on*) _____, so the room was (*bright*) _____. His teacher handed out pencils, but they were all (*sharp*) _____. At recess, his (*friends*) _____ were playing tag. Everyone was (*running*) _____ around and (*yelling*) _____, "You're it!" Henry started to feel (*brave*) _____ when he saw that the (*smallest*) _____ kid in school was running straight towards him! Later, at lunch, Henry's macaroni surprise was served (*hot*) _____ and his milk was (*cold*) _____. Henry was (*disappointed*) _____ when the school day finally (*began*) _____.

Procedure Text Writing Scaffold

Title: _____

Goal: _____

Materials/Equipment/Ingredients

Method

Step 1: _____

Step 2: _____

Step 3: _____

Step 4: _____

Step 5: _____

Synonyms and Antonyms Quiz

Choose the best answer for each question.

1. **What is the meaning of a synonym?**
 - a. when two words are spelled alike
 - b. when two words sound alike
 - c. when two words are opposite of each other
 - d. when two words mean almost the same
2. **What is the meaning of an antonym?**
 - a. when two words are spelled alike
 - b. when two words sound alike
 - c. when two words are opposite of each other
 - d. when two words mean almost the same
3. **What is a good synonym for the word tasty?**
 - a. chewy
 - b. smelly
 - c. yummy
 - d. nasty
4. **What is a good synonym for the word sleepy?**
 - a. hungry
 - b. tired
 - c. thirsty
 - d. quick
5. **What is a good synonym for the word smart?**
 - a. nice
 - b. cool
 - c. intelligent
 - d. grouchy
6. **What is a good synonym for the word pupil?**
 - a. desk
 - b. pencil
 - c. teacher
 - d. student
7. **What is a good antonym for the word leave?**
 - a. arrive
 - b. left
 - c. gone
 - d. leaf
8. **What is a good antonym for the word found?**
 - a. eat
 - b. lost
 - c. pound
 - d. look
9. **What is a good antonym for the word empty?**
 - a. hollow
 - b. giant
 - c. apart
 - d. full
10. **What is a good antonym for the word huge?**
 - a. gigantic
 - b. round
 - c. tiny
 - d. rotten

TUESDAY

Name _____

Date _____

Probability Outcomes Using Fractions (A)

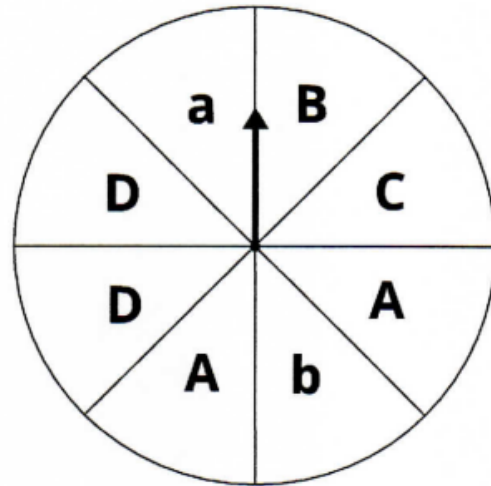
① a) What is the chance, as a fraction, of the spinner landing on:

i) B or b? _____

ii) A or a? _____

iii) C? _____

iv) D? _____



b) What is the chance of the spinner not landing on:

i) b or B? _____

ii) C? _____

c) What is the chance of the spinner landing on:

i) a capital letter? _____

ii) a lower-case letter? _____

d) What is the chance of the spinner landing on a vowel? _____

② Colour the rectangles to represent the probability shown.

a) $\frac{1}{3}$ chance of blue

b) $\frac{1}{3}$ chance of green

c) $\frac{1}{6}$ chance of red

d) $\frac{2}{12}$ chance of yellow



TUESDAY

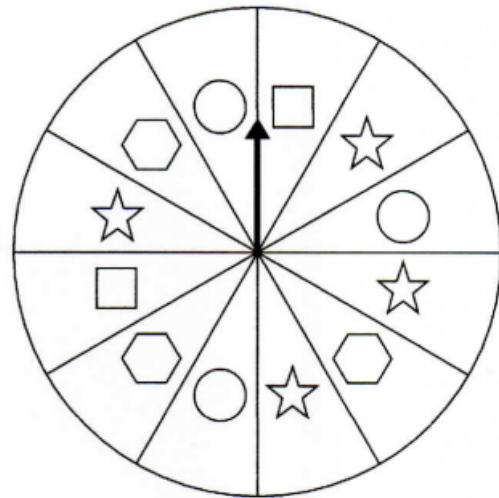
Name _____

Date _____

Probability Outcomes Using Fractions (B)

① a) What is the chance, as a fraction, of the spinner landing on:

- i) a star? _____
- ii) a square? _____
- iii) a circle? _____
- iv) a hexagon? _____



b) What is the chance of the spinner not landing on:

- i) a circle? _____
- ii) a star? _____
- iii) a square? _____
- iv) a hexagon? _____

c) Which shape has the highest likelihood of being landed on by the spinner?

d) Which shape has the least likelihood of being landed on by the spinner?

② Colour the squares to represent the probability shown.

- a) $\frac{1}{10}$ chance of purple
- b) $\frac{2}{5}$ chance of pink
- c) $\frac{3}{10}$ chance of orange
- d) $\frac{1}{5}$ chance of green



WEDNESDAY

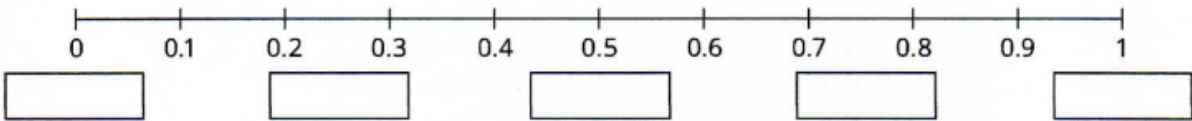
Name _____

Date _____

Probability Range 0-1 (A)

① Write these likelihoods in the correct box under the probability scale.

even chance, likely, impossible, certain, unlikely



② Using the probability scale, rate the likelihood of these events occurring.

- a) Tuesday will come after Monday next week. _____
- b) Everyone in our class will be at school tomorrow. _____
- c) There will be 35 days next December. _____
- d) A tossed coin lands on tails. _____
- e) It will snow in Summer. _____

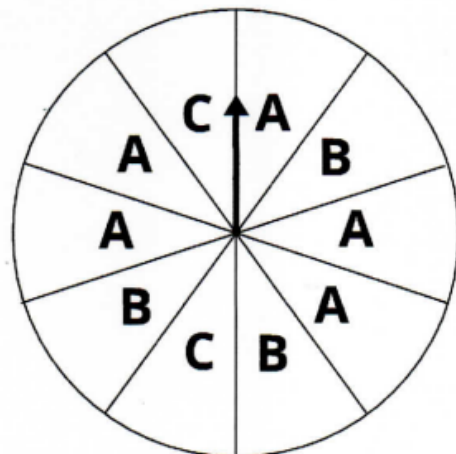
③ Answer **true** or **false**.

- a) There is an unlikely chance of the spinner landing on A.

- b) There is an even chance of the spinner landing on B.

- c) There is an impossible chance of the spinner landing on E.

- d) There is a certain chance of the spinner landing on A.



WEDNESDAY

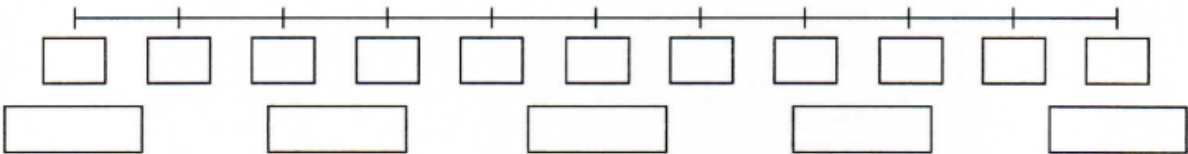
Name _____

Date _____

Probability Range 0-1 (B)

1 Write these values and likelihoods in the correct boxes on the probability scale.

0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1, even chance, likely, impossible, certain, unlikely

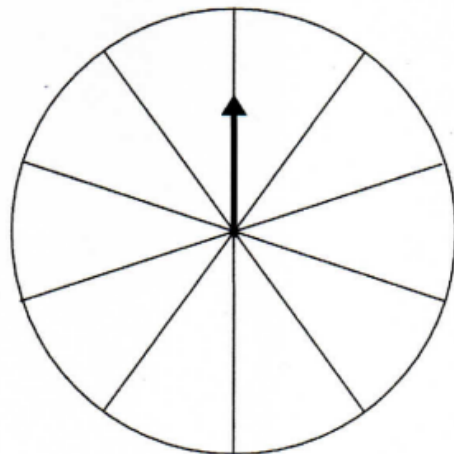



2 Write an event to match each likelihood.

- a) certain _____
- b) likely _____
- c) even chance _____
- d) unlikely _____
- e) impossible _____


3 Fill in the spinner to reflect the likelihoods provided.

- a) An even chance of the spinner landing on a 3.
- b) An unlikely chance of the spinner landing on a 6.
- c) A 1 in 10 chance of the spinner landing on a 1.
- c) A 2 in 10 chance of the spinner landing on a 2.
- d) An impossible chance of the spinner landing on a 4.





How 3D CINEMA Works




the movies to pass through it. In the diagram below we can see how these lenses work.

3D (3-dimensional) cinema aims to provide viewers with realism, allowing them to sense objects as if they are not just on the screen but actually close by. When viewing a 3D movie it seems almost as though we can touch the foreground objects. When an object in the movie travels towards us, we actually sense it getting closer, as though it is travelling from the screen right up to our face. This can be quite frightening, especially if it's a picture of a spear being thrown at us, or a monster's jaw jutting forward trying to bite us. Such realism makes 3D films very exciting to watch.

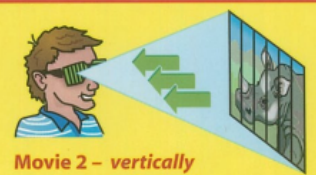
To understand how 3D cinema works, we first need to understand how our eyes see images. Nature has given us the means to judge the closeness of objects by using both eyes at the same time. Each of our eyes looks at a scene from a slightly different angle. Each eye then sends a slightly different image to our brain. Our brain merges the two images into one 3D scene. This combined scene, with various degrees of light and shade, gives us a true sense of depth and space. This type of vision is known as **binocular vision**. [bi, bin: *two*; ocular: *to do with the eyes*].

Try this; close one eye, then hold a finger up at arm's length in front of your face. Look at the finger with your open eye. Now close that eye and focus on your finger with the eye you just had closed. You will notice that your finger appears in a slightly different position for each eye. Each eye is seeing the finger from a different angle. Each separate image gives us a reasonable picture of our finger's position. Now open *both* eyes. The combined image is more accurate than each of those seen through one eye only.




Movie 1 – horizontally polarised

Only the **horizontally polarised movie** passes through the **horizontally polarised lens**.



Movie 2 – vertically polarised

Only the **vertically polarised movie** passes through the **vertically polarised lens**.



Movies 1 & 2 combined

Each eye sees a different movie as recorded by the 2 different camera lenses. They are merged into one very lifelike scene.

So, how do 3D films work?
It's quite simple really. The 3D movie camera is designed to imitate nature, or more accurately, to imitate our binocular vision. A 3D camera is called a *binocular camera* because it has *two* lenses set the same distance apart as a pair of eyes. The binocular camera sees things just like a pair of eyes does. The camera also has *two* recording devices so it actually shoots two movies — each from a slightly different angle.

In the theatre, these two movies are projected onto the screen at the same time, making the overall image indistinct and blurry. We need to wear special 3D viewing glasses so that the two movies can be viewed separately. Different polarised lenses in the 3D glasses allow this separation to take place. One lens is a horizontal polarising lens, the other is a vertical polarising lens. Each lens allows only one of

3D film makers aim to put you inside the action; to make you feel a part of the adventure taking place up on the screen. They also want you to think those close up images are three dimensional — so near you can reach out and touch them! They hope you duck for cover as dangerous creatures and objects hurtle towards you.

To make things even more dramatic, 3D movies are often shown on huge screens that fill your entire range of vision, while *surround sound systems* bombard you with noises from all sides.

But wait . . . there's more!
Some cinemas even have robotic seating where seats rock and sway and jerk about depending upon the onscreen action. In future, special climate control vents on the seats will emit smells and temperatures to match the 3D visuals. Some will even spray you with mist when there is a wet, rainy scene on show . . . and all to keep you entertained!

Designing

LOGOS

Companies and small businesses often identify themselves using simple artistic designs called **logos**. These designs often appear on company buildings, products, websites, brochures and paperwork. Because logos are so widely displayed, it is important that they not only look attractive, but that they clearly and cleverly represent what their company is about.

Each company logo is individual in design. It is different to any other company's design. Companies are not allowed to copy someone else's design. If they do, they get into serious trouble and have to pay an expensive fine.

Companies hire special artists called graphic designers to create their logos. Although logos often appear simple, the artist must consider many factors when creating them. Let us now look at what goes into a successful logo design.

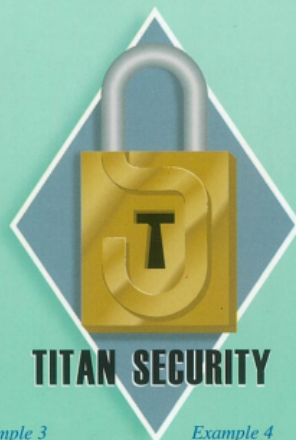
Firstly, the graphic designer must have a clear idea of the mood and feel that a company aims to project. This is referred to as the *company image*. If a company wishes to be seen as a serious, no-nonsense business that provides functional products and services, like medical supplies, trade tools or building construction, it will want a sensible and formal looking logo. (See Example 1.)



Example 1



Example 3



Example 4



Example 2

Secondly, the graphic designer must choose whether to use **alphabet letters** or a **picture** as the logo's main feature. If only letters are used, they will most likely stand for words appearing in the company's title. (See Example 1.) If a picture is used, it must be something related to the company's name, or what it sells. (See Example 2 & 3.) Sometimes the artist can use **clever combinations** of words and pictures. (See Examples 2 & 4.)

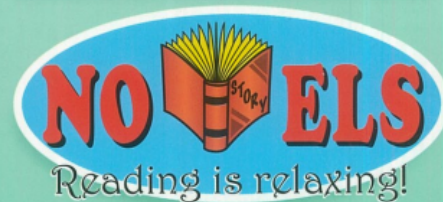
If a company offers products and services for personal pleasure, such as toys, sporting goods, fashion wear or holidays, it may wish to be portrayed as modern and trendy. It will want its logo to appear more relaxed and free-flowing. (See Examples 2 & 3.)

Thirdly, the graphic designer must consider which **colours** suit the company. For example, if the company provides rainforest tours, green would be a suitable colour. If the company is a motel on the beach, blue with yellow, to represent the ocean and the sand, might be appropriate. (See Example 2.)

Finally, the artist must decide which **background shape** works best with the rest of the design. Simple shapes like circles, triangles and rectangles are most effective. Sometimes, using a contrasting background shape makes a logo appealing to the eye. For instance, if the main picture is all curves, a graphic artist may use a straight-edged background shape. (See Examples 2 & 3.)

Now it's time for you to practise what you have learnt. Try designing your own personal logo. On a piece of paper write the name of your favourite hobby in big letters. Change one of the letters in the title to a picture. If possible, choose a picture that is the same shape as the letter it is replacing. (See Examples 5.)

As you can see, even a simple logo requires a lot of thought and planning.



Examples 5



Climate change is one of the biggest environmental issues we face today. High levels of greenhouse gases — carbon dioxide (CO₂), in particular — are choking our cities and blanketing our planet. We need to take action before it is too late. Now is the time to step up and make a change. Or perhaps I should say, *pedal out* and make a change.

Yes, bicycles are one way we can all make a huge difference. If people were to grab the old bike out of the garage, dust it off, and use it to get about, then CO₂ levels would drop dramatically. Did you know that for every kilometre a car covers, it coughs up between 200 and 300 grams of carbon dioxide? A bike produces none.

Cars should be reserved for longer trips and journeys to places that are difficult to reach. Short trips should all be travelled on foot or by bike. In Amsterdam, Holland, almost 35 percent of all travel is done on a bike. Many other European cities average about 20 percent. In these countries bikes are used to move small cargo loads, sell roadside items, deliver parcels and carry people to and from work.

If a bike is not an option because of distance or ease of access, the second option to consider

is public transport. When compared to a car carrying only one person, buses, trams and trains are far more efficient. Each person on a loaded bus produces far less greenhouse gas emissions than a single person in a car that travels the same journey.

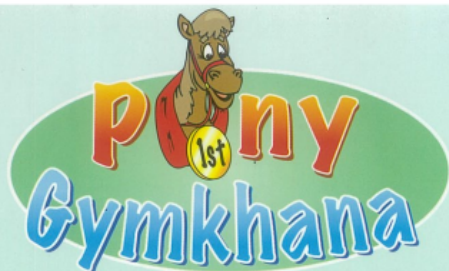
Driving in the city can also mean spending long periods of time stuck in traffic. Drivers are often only able to move a short way before they have to stop again for traffic lights. Roads sometimes look more like a parking lot. Can you imagine the CO₂ that is pouring out of those stationary vehicles? They are discharging greenhouse gases into the air but no-one is moving. Bikes are easier to handle on crowded streets, and cause no pollution. Further, bikes pose few issues with parking. They take little space and can be locked to posts, trees and other fixed

points. Bikes can even be carried inside to keep them safe.

Finally, let's look at the cost. Many families have more than one car. The purchase price of a standard bike is tiny compared to that of even the smallest car. For the price of a second car you could buy a bike for everyone in the family and still have enough money for a nice holiday. Think how relaxing that could be! With a bike, there are no fuel bills either; pedal power is all you need.

Bikes are healthier than cars. They provide a form of exercise as you pedal instead of just sitting in the car. Think about it. A trip on a bike will save money and, perhaps more importantly, it may save our beautiful planet. Don't jump in a car, bike it!





A *gymkhana* is a series of competitive events for horses and their riders. It's a fun way to improve skills and gain confidence and is very popular in countries such as the UK, USA and Australia. At times, riders are required to carry an object while riding. This means they must be able to ride with only one hand on the reins.

The breed or look of the horse used is not important. A speedy pony that can stop and start quickly is best. If a pony is fit and has a good nature it has a much greater chance of winning. A good nature means a pony stays calm during the games, when poles fall and flags flutter near its head. A good pony will let its rider bend and move about in the saddle. A very obedient pony will also work well in a group of horses.

A gymkhana pony needs regular exercise; cantering makes its heart and lungs work harder and strengthens its legs. Ponies need strong legs to make sudden stops, starts and sharp turns. Circling and weaving exercises teach a pony to turn quickly and keep its balance. These exercises begin with the pony slowly walking in a large circle that shrinks after each circuit. As the circle becomes smaller, the pony moves faster, until it is eventually able to make fast, sharp turns.

Riders practise with their ponies regularly. Immediately prior to competing they prepare their horses in a warm-up area. Competitions are divided into riders' age groups and riders choose which events they wish to compete in. While people of all ages compete in gymkhanas, most participants are children.

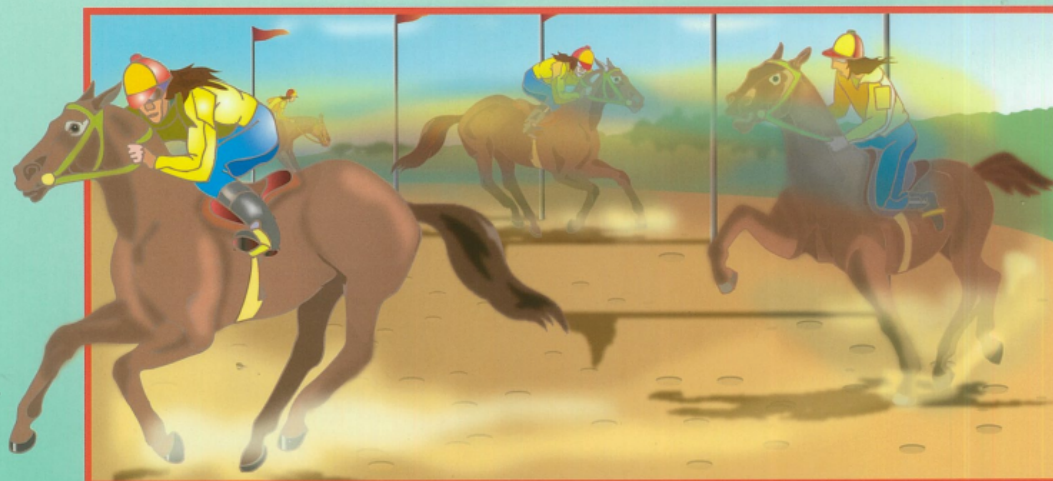
There are various events to test the skills of the riders and most are timed, so speed is very important.

The *Flag Race* is fun. Five poles stand in a row, an equal distance apart from each other. Each has a small flag in the top. Riders race their ponies up the left side of the row to the last pole, grab the flag and race down the right side of the row, back to the starting line. They drop the flag in a bag and ride back for the fourth flag ... the third ... and so on, until all five flags are in the bag. Accuracy is important.

The *Pole-Bending Race* is speedy. Horse and rider weave in and out of a row of five poles, up and down the row as quickly and as tightly as they can. The time will be faster if they stay close to the poles and don't go wide.

The *Walk, Trot, Canter and Lead Race* is disciplined. Riders guide their ponies through a course four times. The first time the pony must walk, the second time it trots and it canters by the third. After this the rider dismounts and leads the pony back to the start. If a pony makes the wrong move (such as cantering when they should be walking), the rider must make it turn around in a circle before continuing on.

These are just a few of the events at a gymkhana. There are many variations, so the pony and rider team who practise regularly will be better prepared for any challenge.



Mighty Dragons



Komodo dragons are the largest lizards in the world. These wild dragons live on a few small Indonesian islands, taking their name from the island of Komodo. These islands are hot and dry, which suits the cold-blooded reptiles. They warm up in the sun during the day and sleep in the cool air at night. When it gets very hot the lizards shelter under trees or dig burrows in the ground.

Females lay 20-40 large eggs and bury them in the sand or dirt. The eggs take eight to nine months to hatch. The babies are long and thin and weigh around 100 grams. At first, their bodies are green with yellow and black bands.

The young live in trees for shelter and protection. At around four years of age the dragons will climb down to live on the ground. Here they grow into powerful adults that will live for 30 years or more. Their colour changes to a dull grey, which provides good camouflage.

The komodo dragon has a flat, narrow head with a rounded snout. Its long, thick body is covered by rough scales and it has four stumpy legs with razor-sharp claws. These legs are very powerful, allowing the komodo to run fast for short stretches. They are also quite strong swimmers.

The komodo dragon's tail is as long as its body. When an adult lizard stands upright on its back legs, it uses its big, strong tail for support. The largest komodo dragon on record was 3.13 metres from head to tail and weighed 165.9 kilograms.

Komodo dragons have a long yellow forked tongue and 57 big, sharp teeth. As their teeth wear out, the lizards grow new teeth to replace them — up to 200 per year. They don't breathe fire like dragons in storybooks, but their mouth carries a deadly weapon — saliva. The saliva that dribbles from a komodo's mouth carries 50 types of deadly bacteria.

Komodo dragons are meat eaters. Bacteria breeds in the rotting meat that stays trapped in the lizard's teeth. When a komodo attacks and bites its prey, toxic bacteria gets into the victim's blood stream. Over time, the animal

will weaken as it slowly moves to escape. The dragon follows the dying animal until it drops. Then it's dinner time. Komodos don't chew their food; they tear the meat off in large chunks and swallow the lot in one gulp.

The big lizard eats wild boar, monkeys, snakes and almost any other animal it sees. They are at the top of the food chain in their natural habitat. Komodos hunt with a keen sense of smell, also using their forked tongue to pick up scents and vibrations.

Known as *Ora* to the people of Komodo, these lizards are at risk of becoming endangered. They are now being bred in captivity all around the world. Amazingly, it is possible for female komodos to lay eggs without the help of male lizards. This is called *parthenogenesis* and could ensure the survival of this species.

