

## PARKHURST STATE SCHOOL

## Maths Challenge Day

## Your Task

To work as a team to complete as many individual Maths Challenges as possible to gain as many points as possible. Some challenges make take longer to complete then others and therefore are worth more points. Each task has to be verified once completed by one of our judges.

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## Maths Challenge

Visit the Admin Carpark. What do each of the individual numbers on the number plates on the vehicles total ? ( 20 points) Create a device that measures one minute A variety of materials can be used. Internet research maybe help! ( 250 points)
Use newspaper and tape to create a free standing tower that is at least 2.5 metres tall and can hold a tennis ball.
(150 points)

## How many 20 cent

 coins match the length of the Administration Building ? Explain how you got this answer( 50 points) Create a colourful collage 1 m by 1 m in size using as many different plane shapes as possible. Name it (50 points)

Produce a podcast or vodcast to explain a concept for students in your class. The list of concepts is attached.

## ( 150 points)

Measure and mark the distance of one kilometre, identifying the starting and finishing points. (100 points)
Use the box of smarties provided to complete at least five suggested activities. Record your activities on a poster.
(100 points)

Solve as many of the mathematical riddles and brain teasers on the sheet provided. Create one of your own. 10 points each) Create an IWB Board Game with rules and resources that teaches a Maths concept to a younger class. (100 points)

Use newspaper and tape to make a bridge between two chairs that is one metre long and holds a 1 kg weight ( 75 points) From a sheet of cardboard, make a string of at least eight paper dolls joined at the hands ( 20 points) Create a paper plane that travels a distance of at least 30 metres. Record your best results on video as evidence. (100 points) Use any art materials you have on hand to create a garland one metre in length with four repeated elements. ( 150 points)
Conduct a class survey and graph your results
to determine the number of red headed students at Parkhurst. ( 50 points)

Recreate and photograph the school logo to at least two metres by two metres on a cement surface. (100 points)

## Use two dice

(IWB dice will be fine) to play ten rounds of the game 'Greedy Pig' Record the results ! ( 50 points)
Wrap a photocopy paper box in the least
possible paper, tying it
in a bow using the least possible ribbon.
( 50 points)
Create a movie, poster or PowerPoint that captures at least ten different shapes within the school grounds. ( 150 points)
Use the Internet to assist you to work out the shortest possible distance from Parkhurst to Melbourne.
( 150 points)

## Capture and print ten

 photographs that represent ten different aspects of Mathematics. (eg; time, shape, mass) ( 50 points)Create a 3D shape using cardboard and staples that has at least thirty flat surfaces. Folding may be needed.
( 100 points)
What is the total age of everyone in your class? What is the average
age of everyone in
your class ?
( 20 points) Create a device using any materials available that can travel a distance of ten metres in less than ten seconds. (100 points)

> Create the largest possible Tangram you can and use it to create and label at least five different animal shapes. (100 points)

What is the distance to the nearest metre between the Yaamba Road fence and the Norman Road fence ? (40 points)
Locate and solve five problems hidden
throughout the school. There is a list of clues to assist you to find them. ( 20 points each) Select a number from the box in the Office and represent it creatively and visually as a work of art. ( 150 points) Survey and graph the colours of vehicles during a fifteen minute period as they pass the front of the school.
( 50 points)
Create a sculpture using at least five different 3D shapes from junk materials.
Give it a creative name.
(150 points)

## You will need to ...

- Photograph or video where possible each task as evidence for the judges.
- Have each task stamped by a judge as it is completed.
- Keep track of your score on the score sheet included.

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## Maths Challenge Day

 Score Sheet| Task | Description | Evidence ( $\checkmark$ ) | Score | Judge's Signature |
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