

# 3-6: REMOTE MATHS

EDITION 1

## DURATION OF EVENTS

**Mathematical language:** Hour, minute, seconds, analogue, digital, clock, morning, afternoon, o'clock, half past, noon, timer, watch, week/s, month, litre, 24 hour time.

### TASK 1: YOUR DAY

Draw, in order, four events that happen as part of your usual day. Record the following:

- The start and finish time of these events using a digital and analogue clock
- How long each event lasts in hours, minutes and seconds

The next time you do these events record how long it took you to complete each one.

Supporting task: <https://fuse.education.vic.gov.au/Resource/LandingPage?ObjectId=30f37d74-1ce4-4f43-affd-1682a2188edc>

### TASK 2: HOW LONG IS A MINUTE?

Read or listen to the story *One Minute* by Somin Ahn, you can listen at:

<https://bit.ly/39RB7OP>

Create a table similar to the one below and write down at least 5 things under each heading that take that length of time.



1 second	1 minute	1 hour	1 day	1 week	1 year
e.g. hop	e.g. cut an apple	e.g. watch two episodes on TV	e.g. drive to Brisbane	e.g. Read <i>Harry Potter</i>	e.g. grow 15cm of hair

### TASK 3: 24 HOUR TIME

- Watch this video <https://education.abc.net.au/home#!/media/1566174/>
- Create a timetable for your week using 24-hour time
- Include meal breaks, exercise and brain pauses, time to learn and time to play.

## EDITION 1: DURATION OF EVENTS (CONT.)

### TASK 4: PREDICTING TIME

Using the images below predict the following. You may record by drawing or writing your answers.

- What might have happened 1 second/1 minute/1 hour before each of these photos were taken?
- What might have happened 1 second/1 minute/1 hour after each of these photos were taken?



Images by Gundula Vogel (bubbles), Pezibear (guitar) and mokhtar akel (soccer), all from Pixabay.

### TASK 5: TIME FOR A BATH

It takes 1 hour to fill a 100 litre bathtub with water, how long would it take to fill 2 ten litre buckets from the same tap?

Explain your working out with drawings, numbers, equations and/or words.

*Enabling support:* what if it took 60 minutes to fill a 100 litre bathtub, how long would it then take to fill up 2 twenty five litre buckets of water?

*Extending prompt:* If it takes 1 hour and 15 minutes to fill up a 100 litre bathtub, how long would it take to collect enough water to fill 4 five litre water bottles?

# MODEL AND REPRESENT NUMBERS

**Mathematical language:** Groups, higher, lower, more than, less than, next, before, tens, hundreds, thousands, millions, ones/units, number line, perspective, estimate, largest, smallest.

## TASK 1: MODELLING 100

- Using blocks (e.g. wooden, plastic, lego) build a tower with exactly 100 blocks.
- Draw your creation from four perspectives: top, front, left side, right side.

## TASK 2: ESTIMATING TOILET PAPER LENGTHS

- Visit Estimation 180 website <http://www.esteemation180.com/days-21-40.html>
- Start at Day 28 and work through until Day 33
- For each day (task) predict how many sheets of toilet paper. For each prediction:
  - Write down a number that is too high
  - Write down a number that is too low
  - Write down your estimate.

## TASK 3: MAKING NUMBERS *Source (Sullivan & Lilburn 2017)*

- What numbers can you make using 1, 0, 2, 7, 8 and 4
- Record your answers in a systematic way
- What is the largest number you can make?
- What is the smallest number you can make?
- *Extending prompt:* Think about how you may use decimal numbers.

## TASK 4: QUANTITY OF NUMBERS

Find at least 3 things in your home that you have the following quantity of:

10	100	1000	10,000	100,000	1,000,000
e.g. chairs	e.g. socks	e.g. Lego pieces			

## EDITION 1: MODEL AND REPRESENT NUMBERS (CONT.)

### TASK 5: HIGHER/LOWER

Play with a partner. You'll need a pack of cards.

- Player 1 places 2 lots of two cards face down in front of the players. Player 1 turns over the first two cards e.g. 6 and 3. These two digits become the number 63.
- Before Player 2 turns over the next two cards, they must predict whether the next two-digit number will be higher than Player 1's or lower than Player 1's.
- If the guess is correct, Player 2 keeps all the cards. If the guess is incorrect, Player 1 keeps the cards.
- *Extending prompts:*
  - Change the game to three digit numbers
  - Change the game to incorporate tenths or hundredths.

## MATHS APP OF THE WEEK: INFINITE VOYAGE



Infinite Voyage takes place on a spaceship that is searching for suitable places where humankind can relocate. To keep the spaceship running, there are a variety of challenges to complete.

Infinite Voyage uses gamification principles to increase confidence in and engagement with mathematics.

**Google Play:** [https://play.google.com/store/apps/details?id=au.gov.vic.education.infinitevoyage&hl=en\\_AU](https://play.google.com/store/apps/details?id=au.gov.vic.education.infinitevoyage&hl=en_AU)

**iOS:** <https://apps.apple.com/au/app/infinite-voyage/id1385878311>

**Cost:** Free

*Look out for more tasks next week!*