**CHANCE 1 – STAGE 2**

**OUTCOMES**

A student:

* MA2-1WM - uses appropriate terminology to describe, and symbols to represent, mathematical ideas
* MA2-3WM - checks the accuracy of a statement and explains the reasoning used
* MA2-19SP - describes and compares chance events in social and experimental contexts

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| **CONTENT** | **plan** |
| **Conduct [chance](http://syllabus.bos.nsw.edu.au/glossary/mat/probability/?ajax" \t "_blank" \o "Click for more information about 'chance') experiments, identify and describe possible outcomes, and recognise variation in results (ACMSP067)** |  |
| use the term 'outcome' to describe any possible result of a chance experiment http://syllabus.bos.nsw.edu.au/wsimages/cca/l.png | 1 |
| predict and list all possible outcomes in a chance experiment, eg list the outcomes when three pegs are randomly selected from a bag containing an equal number of pegs of two colours | 1 |
| predict and record all possible combinations in a chance situation, eg list all possible outfits when choosing from three different T-shirts and two different pairs of shorts CT | 1 |
| predict the number of times each outcome should occur in a chance experiment involving a set number of trials, carry out the experiment, and compare the predicted and actual results | 1 |
| keep a tally and graph the results of a chance experiment (Communicating) | 2 |
| explain any differences between expected results and actual results in a chance experiment (Communicating, Reasoning) CT | 2 |
| make statements that acknowledge 'randomness' in a situation, eg 'The spinner could stop on any colour' (Communicating, Reasoning) http://syllabus.bos.nsw.edu.au/wsimages/cca/l.pngCT | 2 |
| repeat a chance experiment several times and discuss why the results vary (Communicating) CT | 2 |

**CHANCE 2 – STAGE 2**

**OUTCOMES**

A student:

* MA2-1WM - uses appropriate terminology to describe, and symbols to represent, mathematical ideas
* MA2-19SP - describes and compares chance events in social and experimental contexts

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| **CONTENT** | **Week** |
| **Describe possible everyday [events](http://syllabus.bos.nsw.edu.au/glossary/mat/event/?ajax" \t "_blank" \o "Click for more information about 'events') and order their [chances](http://syllabus.bos.nsw.edu.au/glossary/mat/probability/?ajax" \t "_blank" \o "Click for more information about 'chances') of occurring (ACMSP092)** |  |
| use the terms '[equally likely](http://syllabus.bos.nsw.edu.au/glossary/mat/equally-likely-outcomes/?ajax" \t "_blank" \o "Click for more information about 'equally likely')', 'likely' and 'unlikely' to describe the chance of everyday events occurring, eg 'It is equally likely that you will get an [odd](http://syllabus.bos.nsw.edu.au/glossary/mat/odd-number/?ajax" \t "_blank" \o "Click for more information about 'odd') or an [even number](http://syllabus.bos.nsw.edu.au/glossary/mat/even-number/?ajax" \t "_blank" \o "Click for more information about 'even number') when you roll a die' http://syllabus.bos.nsw.edu.au/wsimages/cca/l.png | 3, 4 |
| compare the chance of familiar events occurring and describe the events as being 'more likely' or 'less likely' to occur than each other http://syllabus.bos.nsw.edu.au/wsimages/cca/l.png | 3, 4 |
| order events from least likely to most likely to occur, eg 'Having 10 children away sick on the same day is less likely than having one or two away' | 3, 4 |
| compare the likelihood of obtaining particular outcomes in a simple chance experiment, eg for a collection of 7 red, 13 blue and 10 yellow marbles, name blue as being the colour most likely to be drawn out and recognise that it is impossible to draw out a green marble | 3, 4 |
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| **Identify everyday events where one occurring cannot happen if the other happens (ACMSP093)** |  |
| identify and discuss everyday events occurring that cannot occur at the same time, eg the sun rising and the sun setting CT | Missing |
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| **Identify events where the chance of one occurring will not be affected by the occurrence of the other (ACMSP094)** |  |
| identify and discuss events where the chance of one event occurring will not be affected by the occurrence of the other, eg obtaining a 'head' when tossing a coin does not affect the chance of obtaining a 'head' on the next toss | Missing |
| explain why the chance of each of the outcomes of a second toss of a coin occurring does not depend on the result of the first toss, whereas drawing a card from a pack of playing cards and not returning it to the pack changes the chance of obtaining a particular card or cards in future draws (Communicating) http://syllabus.bos.nsw.edu.au/wsimages/cca/l.pngCT | Missing |
| compare events where the chance of one event occurring is not affected by the occurrence of the other, with events where the chance of one event occurring is affected by the occurrence of the other, eg decide whether taking five red lollies out of a packet containing 10 red and 10 green lollies affects the chance of the next lolly taken out being red, and compare this to what happens if the first five lollies taken out are put back in the jar before the sixth lolly is selected CT | Missing |