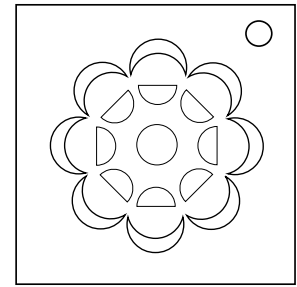# On the Subject of The Moon

Brrr, it's very cold here on the dark side. Who turned off the Sun?

- The module consists of eight blue crescents, eight blue half-moons, and a centre button. Buttons on the same compass point are considered to be a set.
- To defuse the module, you must press a sequence of buttons in the correct order. Pressing an incorrect button will cause a strike and reset the sequence.

- Using the sets that are lit and the variable table below, determine which button in each set is correct.
- Warning: when you press a correct button, the light will switch on/off. The variable table always refers to the original configuration of lights.
- Unless otherwise stated, the positions referred to start in the left-most position (reading clockwise).

1st lit set	2nd unlit set	3rd lit set	3rd lit set (from right)	4th unlit set	2nd unlit set (from right)	Final unlit set	Final set
D batteries	Consonants in serial	Digits in serial	AA batteries	Ports	Indicators	Modules	Port plates

- For each variable (x) modulo 7, the correct button is:

  - x < 3 = outer button.
  - 3 ≤ x < 5 = inner button.
  - x ≥ 5 = centre button.

- To determine the order, start with the right-most (reading clockwise) unlit set and move clockwise on unlit sets only for the sum of the serial number digits. This is your starting set.
- Convert your serial number letters into equivalent digits.
- For any single digit numbers, add a zero at the start. Reverse each number and modulo 7 the result.
- Each movement to a new set is represented by your new numbers. Use each number in order. For each number (n):

    ○ n < 4 = two steps clockwise.
    ○ n > 3 = two steps counterclockwise.

- Do not answer the same set twice. If you are moved onto a solved set, continue moving a single space in the given direction until you reach an unsolved set.
- After progressing through the converted serial numbers, you will have one set remaining. This is your final set.
- The module will be solved once you have correctly pressed your eight button sequence or when you have pressed the centre button.