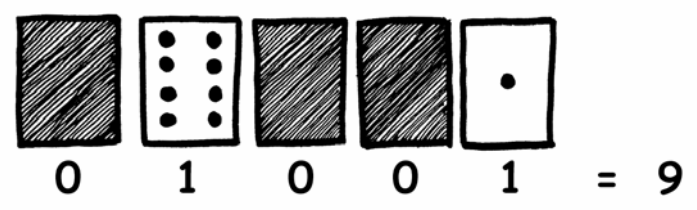
# Worksheet Activity: Working With Binary

The binary system uses **zero** and **one** to represent whether a card is face up or not. **0** shows that a card is hidden, and **1** means that you can see the dots. For example:




Can you work out what **10101** is? What about **11111**?

What day of the month were you born? Write it in binary. Find out what your friend's birthdays are in binary.

## Try to work out these coded numbers:

☒☑☒☒☑ =
(☑=1, ☒=0)

👍👎👍👎 =
(👍=1, 👎=0)

⇧⇩⇧ =
(⇧=1, ⇩=0)

✚✚✖✚ =
(✚=1, ✖=0)

○○○○○ =
(⊙=1, ○=0)

↻↻↻↻↻ =
(↻=1, ↺=0)

📬📪 =
(📬=1, 📪=0)

▲▼▲▼▼ =
(▲=1, ▼=0)

☹ =
(☺=1, ☹=0)

♠♠♠♠♠ =
(♠=1, ♣=0)

**Extra for Experts:** Using a set of rods of length 1, 2, 4, 8 and 16 units show how you can make any length up to 31 units. Or you could surprise an adult and show them how they only need a balance scale and a few weights to be able to weigh those heavy things like suitcases or boxes!