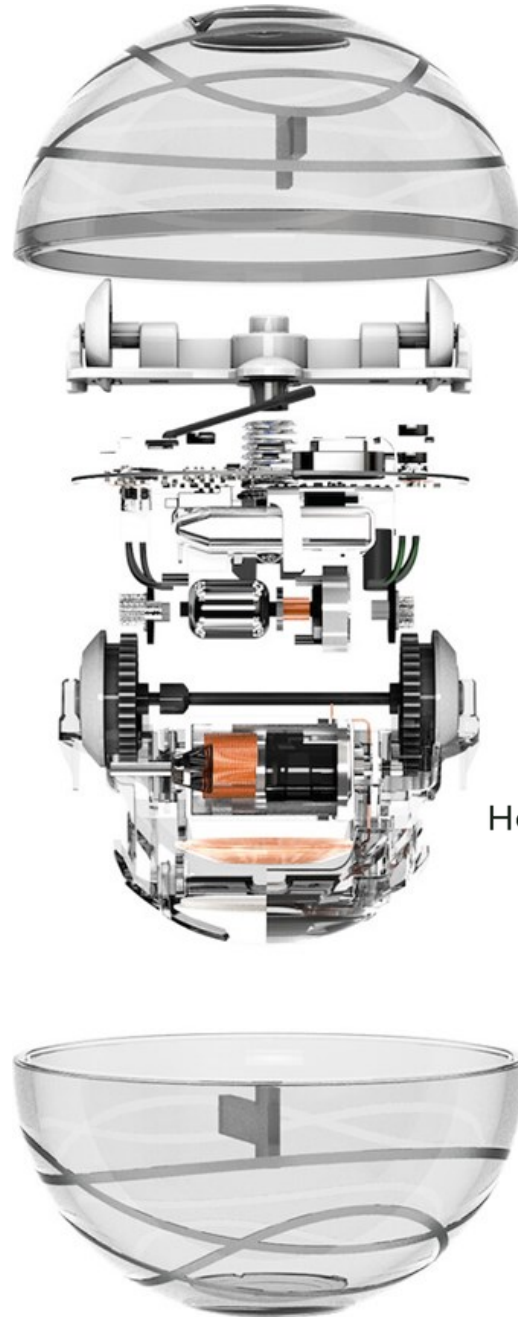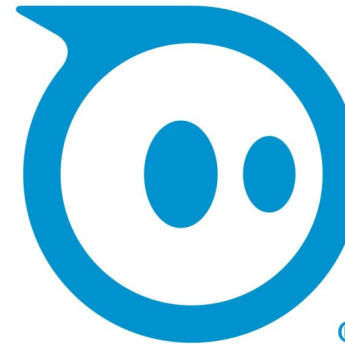# Year 6 - Computing - Sphero

Glossary:

- **predict** - You predict what you think the code will do.

- **Program** - A set of ordered commands that can be run by a computer to complete a task

- **Decompose** - To break down a task into smaller, more achievable steps

- **Sequence** - The order in which things are arranged or happen

- **Loop** - Commands that repeatedly run a defined section of code

- **Loop (count-controlled)** - A command that repeatedly runs a defined section of code a predefined number of times

- **Debug** - The process of finding and correcting errors in a program

- **condition** - A statement that can be either True or False

- **variable** - A named piece of data (often a number or text) stored in a computer's memory, which can be accessed and changed by a computer program

- **robot** - A machine capable of carrying out a complex series of actions automatically

What shape will this create?

```
on start program
roll   0°    at  100  speed for  2.5s
roll   90°   at  100  speed for  2.5s
roll   180°  at  100  speed for  2.5s
roll   270°  at  100  speed for  2.5s
```
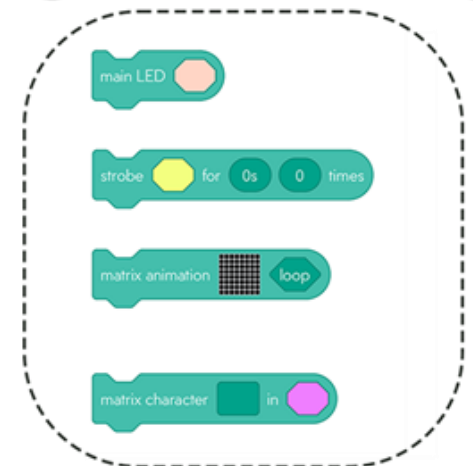
Heading   Speed   Duration

```
roll  0°  at  50  speed for  2s
```

Light blocks to try

```
main LED
strobe  for  0s  0  times
matrix animation      loop
matrix character      in
```

Sticky Knowledge:

- To know computer algorithms can be triggered by sensor inputs (when it is dark / when robot hits).

- To know how to code a robot around a specific path using a block coding language.