



## Rise of the Robots

Year 2 SUMMER 1 | Cycle A

### Can robots be trusted?

Values [RESPECT](#) | [EMPATHY](#) | [COURAGE](#)

**Overview** In this unit, children will build their own robots, using coding and DT skills to plan, create and evaluate their designs. They will think about the benefits and controversies of artificial intelligence drawing on examples from cutting-edge and future technologies. The children will evaluate the value of robots in society and design their own with a social good in mind.

**Engagement** Through a robot launch day children will collaborate in groups to create and programme their own robots. They will welcome visitors from the University robotics department and ask questions of the experts about the implications for the technology that is currently being developed.

**Celebration** Parents will be invited to see a demonstration of children's creations and an exhibition of related topic learning. Children could make films of their robots and present these as documentaries.

#### Habits of Mind

Children will need to cooperate in small groups, they will need to problem-solve and persevered in programming their robots.

#### Oracy & Dialogue

Children will explore the ethical issues involved in artificial intelligence, when robots have to make decisions. They will use oracy framework skills to present their robots.

#### Playful Enquiry

With their robot creations and through role play and exploration, children will create fantasy stories.

### Curriculum Spotlight

**Focus Texts:** *How to be a dog, No Bot, The Robot and the Bluebird*

[Place & Time](#)

Geography ▲ GKS1.5a.ii, GKS1.5c

History ◆ HKS1.1c

[Citizenship & Ethics](#)

PSHE ▲ : Jigsaw

[Arts & Creativities](#)

Art ★ : Drawing

Music ★ : Musicianship

D&T ▲ ; beyond NC.

[Physical & Emotional Health](#)

PE ★ ◆ : Dance and Athletics

[Faith & Belief](#)

RE ★ : Judaism

[Language, Literacy and Oracy](#)

Writing ★ :

Grammar ★ :

[Science & Technology](#)

Science: n/a

DT: DTKS1.1a, DTKS1.3b, DTSK1.4b

Computing: CSK1.1a, 1b

#### Visitors

Robotic University link engineers (Robotic Department).

[Educational Visits / Enrichment Day](#)

Visit to Robotics Department, Lego programming enrichment day.

[Learning Street](#)

Futuristic ambiance – silver colours. "The Future?".

[Display](#)

Robot making and children's fantasy stories.

[Home Learning Project](#)

None specified.

| Subject                     |                         | Learning Journey                                                                                                      |                                                                           |                                                                                             |                                                                          |                                                                                                                |
|-----------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
|                             |                         | Week 1                                                                                                                | Week 2                                                                    | Week 3                                                                                      | Week 4                                                                   | Week 5                                                                                                         |
| Arts & Creativities         | Art                     | ★                                                                                                                     | ★                                                                         | ★                                                                                           | ★                                                                        | ★                                                                                                              |
|                             | Music                   | ★                                                                                                                     | ★                                                                         | ★                                                                                           | ★                                                                        | ★                                                                                                              |
|                             | Key Texts               | No Bot                                                                                                                |                                                                           |                                                                                             | How to be a dog                                                          |                                                                                                                |
| Language, Literacy & Oracy  | Writing                 | Fantasy                                                                                                               | Fantasy                                                                   | Fantasy                                                                                     | Assessment                                                               | Instructions                                                                                                   |
|                             | Spelling                | The /ɔ:/ sound spelt a before l and ll                                                                                | The /ʌ/ sound spelt o                                                     | The /l/ or /ə/ sound spelt – el at the end of words                                         | Homophones and near-homophones                                           | The /ʒ/ sound spelt s                                                                                          |
|                             | Grammar                 | Imperative verbs                                                                                                      | Statements and questions                                                  | Based on assessment                                                                         | Based on assessment                                                      | Based on assessment                                                                                            |
| Mathematics                 | Maths                   | Fractions                                                                                                             | Fractions                                                                 | Statistics                                                                                  | Geometry                                                                 | Geometry                                                                                                       |
| Science & Technology        | Science                 |                                                                                                                       |                                                                           |                                                                                             |                                                                          |                                                                                                                |
|                             | Design & Technology ✦   | DTSK1.1a Design purposeful, functional, appealing products for themselves and others to use based on design criteria. |                                                                           | DTSK1.4b Explore and use mechanisms (e.g. levers, sliders, wheels, axels) in their products |                                                                          | DTSK1.3b Evaluate their ideas and products against design criteria                                             |
|                             | Computing ✦             | Understand that algorithms are implemented as programs on a range of digital devices*                                 | Create and debug simple programs (e.g. 2DIY Hour of code/Espresso Coding) | Plan a simple algorithm that controls a toy                                                 | Program a virtual object to move to on-screen objects                    | Record a sequence of instructions in a common format<br>Evaluate success of instructions and debug accordingly |
| Place & Time                | Geography               |                                                                                                                       |                                                                           |                                                                                             |                                                                          |                                                                                                                |
|                             | History                 |                                                                                                                       |                                                                           |                                                                                             |                                                                          |                                                                                                                |
| Physical & Emotional Health | PE                      | Dance - copy and perform simple movements/rhythmic patterns.                                                          | Dance - copy and perform simple movements/rhythmic patterns.              | Dance - understand that dance plays an important part in other cultures.                    | Dance - understand that dance plays an important part in other cultures. | Dance - understand that dance is active and that changes will occur in their bodies.                           |
|                             |                         | Athletics                                                                                                             | Athletics                                                                 | Athletics                                                                                   | Athletics                                                                | Athletics                                                                                                      |
| Citizenship & Ethics        | PSHE                    | Families                                                                                                              | Keeping Safe                                                              | Friends and Conflict                                                                        | Secrets                                                                  | Trust                                                                                                          |
|                             | Philosophy for Children | ★                                                                                                                     | ★                                                                         | ★                                                                                           | ★                                                                        | ★                                                                                                              |
| Faith & Belief              | RE                      | How special is the relationship Jews have with God?                                                                   | Agreements                                                                | The Covenant                                                                                | Promises                                                                 | The Shema                                                                                                      |