Robots

Bitterns Spring Term 2018

Home learning: It is essential that all children are regularly reading at home (we encourage daily). We use the home school book to monitor this so please ensure you record your child's reading. Children who have not been reading at home will do extra reading in class. Each Wednesday maths homework is set either online or via their folder.

As discussed in structured conversations, I will also send home their spelling logs occasionally so that children can review the spellings they have been correcting in class.

Showing time on Fridays this term will focus on children's achievements out of school (swimming, dancing, music, karate etc.) and places of interest. (e.g. museums and exhibitions they have visited) No toys or crafts this term please.

Geography
- How do robots help us find out about our world?
- What do we use to take photos from space?

Art and Design
- If you designed a robot, what would it do?
- Would it make life better?
- Could it be improved?
- What would it look like?
- How would it move?

History
- When was the first computer invented?
- How have computers changed over time?
- How have computers changed our lives?
- How often do we use computers?
- Will they change in the future?

Maths
An overview of the objectives to be covered in maths is provided on a separate sheet. If you would like more details about how we teach these areas, please use the Key stage 1 calculation booklet.

R.E.
What happens at Pesach (Passover) and why is it important for Jews?
What does the cross mean to a Christian?

Science
- What is a force?
- How do we use them?
- Why are they important?
- Can things work without them?
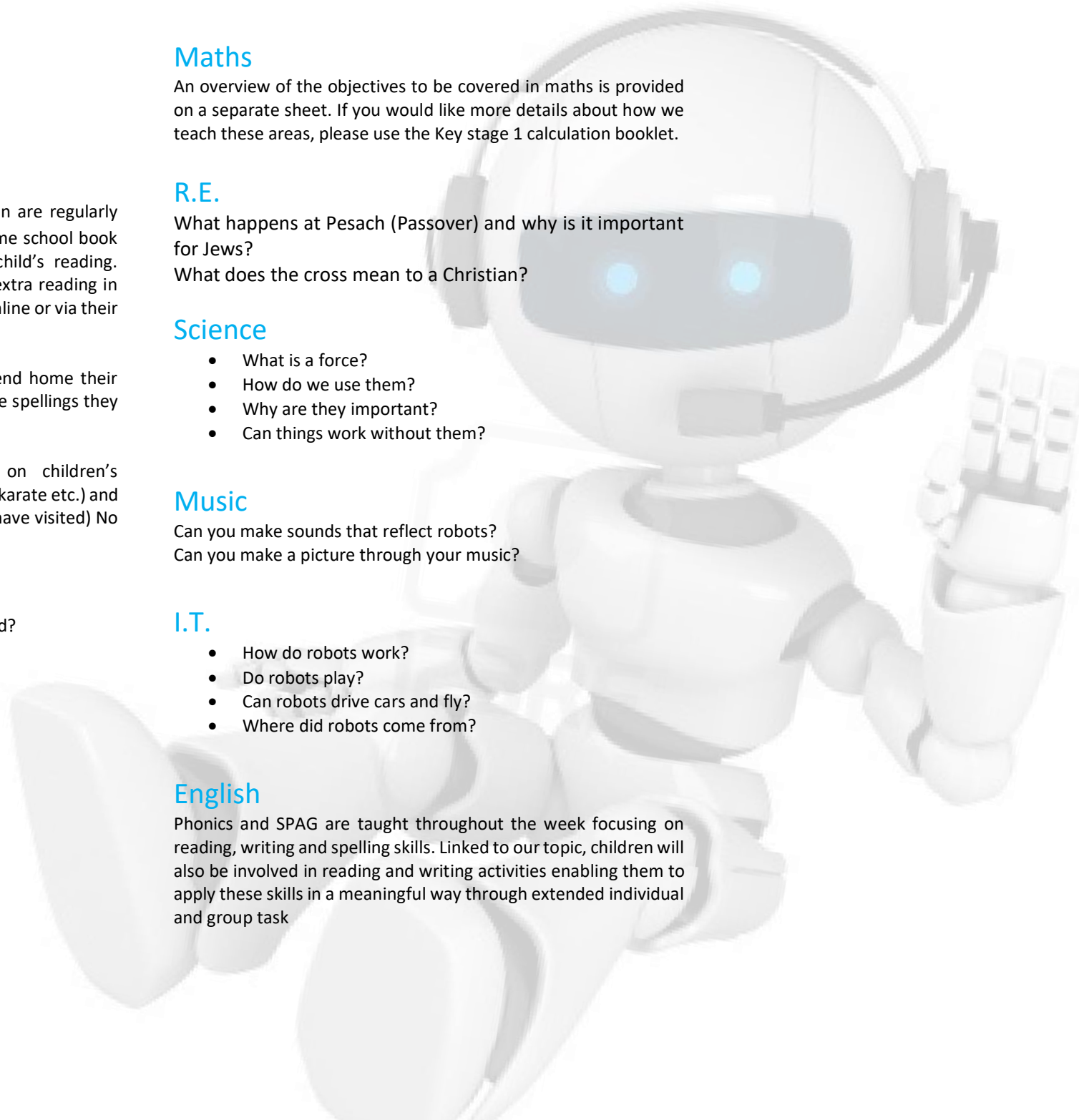
Music
Can you make sounds that reflect robots?
Can you make a picture through your music?

I.T.
- How do robots work?
- Do robots play?
- Can robots drive cars and fly?
- Where did robots come from?

English
Phonics and SPAG are taught throughout the week focusing on reading, writing and spelling skills. Linked to our topic, children will also be involved in reading and writing activities enabling them to apply these skills in a meaningful way through extended individual and group task

week	Area of Maths	Year 2 Learning Outcomes	Year 1 learning outcomes
1	**NPV** Number and place value; **MAS** Mental addition and subtraction	• **NPV.14** Count on and back in ones to 100 • **NPV.19** Understand place value in 2-digit numbers by creating 2-digit numbers, placing them on a number line and solving place value additions and subtractions • **NPV.15** Recognise, read and write numbers to 100 • **MAS.09** Say the number 1 more (≤ 20) • **MAS.10** Say the number 1 less (≤ 20) • **MAS.13** Count on 1, 2, 3 more than numbers up to and just beyond 20 • **MAS.14** Count back 1, 2, 3 from numbers up to and just beyond 20	• **NPV.19** Understand place value in 2-digit numbers by creating 2-digit numbers, placing them on a number line and solving place value additions and subtractions • **NPV.20** Order and compare 2-digit numbers and say a number between. Use language: equal to, more than, less/fewer than, most, least • **MAS.20** Add or subtract 10 from 2-digit numbers • **MAS.26** Add and subtract 9 and 11 to and from 2-digit numbers
2	**MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra; **MMD** Mental multiplication and division	• **MAS.12** Find number bonds to 10 and subitise to 10 • **MAS.01** Find addition pairs to 5 and subitise to 5 • **MAS.02** Find addition pairs to 6 and subitise to 6 • **MAS.03** Find addition pairs to 7 and subitise to 7 • **MAS.15** Use number facts to 10 to solve problems including word problems • **MAS.06** Find addition pairs to 8 and subitise to 8 • **PRA.14** Understand a symbol being used for an unknown quantity • **PRA.15** Solve missing number problems involving addition and subtraction (≤ 10) • **PRA.16** Solve word problems involving addition and subtraction • **MMD.12** Double numbers to 5 and find related halves	• **MAS.12** Find number bonds to 10 and subitise to 10 • **MAS.23** Add 1-digit to 2-digit numbers, bridging 10 and using known facts • **MAS.19** Recall number facts to 20; number pairs (4 to 20) and bonds to 10 and 20 • **MAS.29** Add 1-digit to 2-digit numbers to reach the next multiple of 10 • **MAS.33** Subtract 2-digit from 2-digit numbers by counting up • **PRA.28** Use place value and number facts to solve problems
3	**MAS** Mental addition and subtraction **MAS** Mental addition and subtraction **MAS** Mental addition and subtraction	• **MAS.13** Count on 1, 2, 3 more than numbers up to and just beyond 20 • **MAS.16** Add 1-digit to 2-digit numbers and add to next multiple of 10, by counting on	• **MAS.29** Add 1-digit to 2-digit numbers to reach the next multiple of 10 • **MAS.33** Subtract 2-digit from 2-digit numbers by counting up • **MAS.12** Find number bonds to 10 and subitise to 10 • **MAS.19** Recall number facts to 20; number pairs (4 to 20) and bonds to 10 and 20 • **MAS.21** Find change from 10p and 20p by counting up • **MAS.27** Find change from 20p and 50p by counting up • **MAS.28** Add/subtract 2-digit numbers to/from 2-digit numbers by counting on/back • **PRA.32** Use coins to solve simple problems involving addition, subtraction and giving change • **MEA.36** Give change using appropriate coins and calculating the amount to be given
4	**GPS** Geometry: properties of shapes; **STA** Statistics; **MEA** Measurement	• **GPS.08** Recognise, name and describe cubes, spheres, cones, cuboids, pyramids • **GPS.09** Sort 3D shapes according to their properties • **STA.11** Sort objects on to a Venn diagram (two overlapping sets) • **MEA.13** Begin to recognise units of time (minutes, hours, days, weeks, months, years)	• **GPS.08** Recognise, name and describe cubes, spheres, cones, cuboids, pyramids • **GPS.28** Identify 2D shapes on the faces of 3D shapes, e.g. circle on a cone and triangle on a tetrahedron • **GPS.27** Make cubes, cuboids and pyramids using modelling materials • **GPS.38** Make cuboids, cubes, tetrahedra and pyramids from nets • **GPD.12** Describe positions using 3D shapes • **MEA.28** Tell the time to the nearest quarter of an hour using digital and analogue clocks
5	**NPV** Number and place value; **MMD** Mental multiplication and division	• **NPV.17** Count on and back in 10s from any number up to 100 • **NPV.18** Estimate a set of objects (≤100) and count in 5s or 10s to check • **MMD.17** Count in 10s to 100 • **MMD.18** Count in 5s to 50 • **MMD.14** Count in 2s to 20	• **NPV.20** Order and compare 2-digit numbers and say a number between. Use language: equal to, more than, less/fewer than, most, least • **NPV.19** Understand place value in 2-digit numbers by creating 2-digit numbers, placing them on a number line and solving place value additions and subtractions • **NPV.24** Round 2-digit numbers up or down to the nearest 10 • **NPV.18** Estimate a set of objects (≤100) and count in 5s or 10s to check