Computing and coding Weekly activities

Year 3 - Computational thinking and concept

Task 1

Focus: Abstraction

Abstraction is about simplifying things and focusing on important information. This game helps you to focus on the important adjectives which describe what you are thinking of.

I Tell Activity

Play the game, 'I Tell' with your sibling or a family member which is like 'I spy', but you must use 3 adjectives to describe the item you are thinking of and see if the other person can guess it.

Task 2 (CODE)

Pre-reader Express (2019)

Complete a variety of programming activities by clicking on the link below:

https://studio.code.org/s/pre-express-2019

Task 3 (CODE)

Dance party – Help your sprites to dance. Click on the link below:

https://studio.code.org/s/dance-2019/stage/1/puzzle/1

Year 4 – Computational thinking and concept

Task 1

World War II code cracking activity.

"We are running out of time – the Allied forces need us!"

or

"If the sub is not stopped, it could mean disaster

for the invasion!"

Enemy sub at invasion location. Stop.
Intercepted encrypted enemy message. Stop.
Need Code Crackers to decipher. Stop.
Allied D-Day invasion imminent. Stop.
Command needs you. Stop.
Awaiting your reply. Stop.

The mission is not yet complete. Crack the code below. Listen to the video. The code is all jumbled up, so you will need to reorder it.

12 15 3 1 20 5 4	12 15 1 4	19 16 5 5 4	4 5 16 20 8	1 20
21 2 15 1 20	10 21 14 15	15 18 4 5 18 19	3 8 1 18 7 5 19	
20 5 14	2 5 1 3 8	20 23 5 12 22 5	18 5 1 4 25	
13 9 12 5 19	11 5 5 16	11 14 15 20 19	1 23 1 9 20	
14 15 18 20 8	15 6	6 21 18 20 8 5 18	15 21 20	
25 15 21 18	3 15 13 13 1 14 4	8 9 7 8	7 5 18 13 1 14	

Can you solve the code? Here is the cipher key to help you.

Cipher (Key)

A = 1	G= 7
T = 20	E = 5

Task 2 – Magnificent maze

Can you get through this magnificent maze? Program your sprite to move through the maze.

Task 3 - Sorting it out!

Activity: There's a goat in the pig pen! Help Barefoot Farm sort out this mess.   Use a nickname when playing the game.

Year 4 solution

Code Cracking Activity Strips Solution

Full message reads:

Located German U-boat ten miles north of Juno Beach

Keep your speed at twelve knots

Load depth charges ready

Await further orders

High command out

12 15 3 1 20 5 4	12 15 1 4	19 16 5 5 4	4 5 16 20 8	1 20
Located	load	speed	depth	at
21 2 15 1 20	10 21 14 15	15 18 4 5 18 19	3 8 1 18 7 5 19	
U-boat	Juno	orders	charges	
20 5 14	2 5 1 4 8	20 23 5 12 22 5	18 5 1 4 25	
ten	beach	twelve	ready	
13 9 12 5 19	11 5 5 16	11 14 15 20 19	1 23 1 9 20	
miles	keep	knots	await	
14 15 18 20 8	15 6	6 21 18 20 8 5 18	15 21 20	
North	of	further	out	
25 15 21 18	3 15 13 13 1 14 4	8 9 7 8	7 5 18 13 1 14	
your	command	high	German	

Year 5 and 6

Task 1 - Using logical thinking

Logical thinking is the process of applying rules to problem solving

Solve the Riddle

A farmer has to get a fox, a chicken and a sack of corn across a river.

He has a boat which carries him and one other thing.

If the fox and the chicken are left together, the fox will eat the chicken.

If the chicken and corn are left together, the chicken will eat the corn.

If the farmer is there, all is well. How can he get everyone over the river safely?

Task 2 – Using online programming software.

Why not choose any of the activities below and create some amazing games or programs?

- Create an online Scratch 3 account (please get your parents' permission)
- Download a free version of Scratch 2 by clicking on https://scratch.mit.edu/download/scratch2 (please get your parents' permission)
- Look at the creative programs you can make. Follow the step by step guide to design some of these amazing programs for yourself: https://scratch.mit.edu/ideas
- Use the code.org website to create amazing games. https://studio.code.org/courses

Year 5 – 6 solution

Logical Reasoning

Solution

1. Farmer takes chicken across

2. Comes back

3. Farmer takes fox across

4. Comes back with chicken