GIVING ORDERS – B1

I. About this lesson

Activity title: Robots and programming

Level: B1+

Recommended age: 12+

Subject: English as a foreign language

Timing: 45 minutes

Resources:

- Computer with internet connection,
- worksheet,
- The Oracle Code, by Marieke Nijkamp.

Genre: Graphic novel

Learning objectives:

a. Introduction to programming
b. Imperative
c. Practice writing and speaking in English.

Materials needed: pen, paper, whiteboard, markers.

II. Lesson scenario

1. INSTRUCTIONS FOR THE TEACHER

About the comic

Title: The Oracle Code

Type of comic: Graphic novel

Authors: Marieke Nijkamp

About the author: Marieke Nijkamp was born and raised in the Netherlands. A lifelong student of stories, language, and ideas, she spends as much time in fictional worlds as she does the real world. She loves to travel, roll dice, and daydream.

Marieke's YA novels include: "This Is Where It Ends", which follows four teens during the fifty-four minutes of a school shooting. "Before I Let Go", a haunting murder mystery set during a cruel Alaskan winter. "Even if we break", a cabin-in-the-woods type thriller, following five teens, the RPG game that binds them, and the secrets that threaten to break them. "At The End Of Everything", pitched as "The Society" meets "Contagion", and many more (more information available at: http://www.mariekenijkamp.com/musings/marieke/)

Summary: The blob reads: "After a gunshot leaves her paralyzed, Barbara Gordon enters the Arkham Center for Independence, where Gotham's teens undergo physical and mental rehabilitation. Now using a wheelchair, Barbara must adapt to a new normal, but she cannot shake the feeling that something is dangerously amiss. Within these walls, strange sounds escape at night; patients go missing; and Barbara begins to put together pieces of what she believes to be a larger puzzle.

But is this suspicion simply a result of her trauma? Fellow patients try to connect with Barbara, but she pushes them away, and she'd rather spend time with ghost stories than participate in her daily exercises. Even Barbara's own judgment is in question.

In *The Oracle Code*, universal truths cannot be escaped, and Barbara Gordon must battle the phantoms of her past before they swarm her future." (available at: https://www.goodreads.com/en/book/show/51135826-the-oracle-code)

Introduction (5 min)

This is a Content and Language Integrated Learning activity aiming to teach English while learning programming. Start the lesson with a short "Check IN" by telling students:

a. Today, we will learn to programme a simple robot.

b. To do so, we would read a comic to get inspiration and ideas.

c. Then, before we programme an actual robot, we have to learn how to give orders to someone.

d. After we practice giving orders in general, we will practice giving programming orders in particular.

e. Once the exercises will be done, we will recap and call it a day!

Exercise 1: Introduction to technology through a graphic novel (15 min)

a. Print the worksheet and distribute it among students

b. Ask students to read the extract from the graphic novel (5 min).

c. Ask students to complete Task 1 in pairs (5 min)

d. Ask all pairs to report to class.

Exercise 2: Programming = giving orders (15 min)

a. Explain to students that programming means giving orders to a robot.

b. To give orders, we use what is called the imperative.

c. Ask students to read what the Robot-Blobs have to say about the imperative.

d. Once they read the Blobs, ask them in pairs to prepare an example of using the imperative.

e. Ask each student to give an order to the person sitting next to them. The ordered student may execute.

f. Ask students to fill-in the comic clouds. Possible answers: Come/go upstairs, Do your homework, Turn right, Play football, Don't talk during the lesson, Wash your teeth, Save the animals, Read the instructions, Don't be late for school, Turn off your mobiles.

g. Review moving verbs and expressions (go straight, turn left/right, start, end, etc).

h. Ask students to complete the evaluation in pairs or small groups. Check their progress.

Possible answers to exercise 3 from top-down, from left to right:

- Come/Get, Do, Turn,
- Play, Don't speak, Brush
- Love, Read, Don't be, Turn

Finish the lesson with a short "Check out" (5 min)

a. During the lesson we learned the basics of programming.

b. The most important aspect of programming is giving clear orders.

c. As an assignment you need to write an informal email to a friend presenting programming to them. The deadline is our next lesson.

2. WORKSHEET FOR STUDENTS

EXERCISE 1: Introduction

a. Why do people get involved with technology? Read pages 7-9 of your comic and discuss it in pairs.

b. If you were a hacker what sort of hacker name would you give yourself? If possible, do a little google search to get ideas.

c. What is programming, you think?
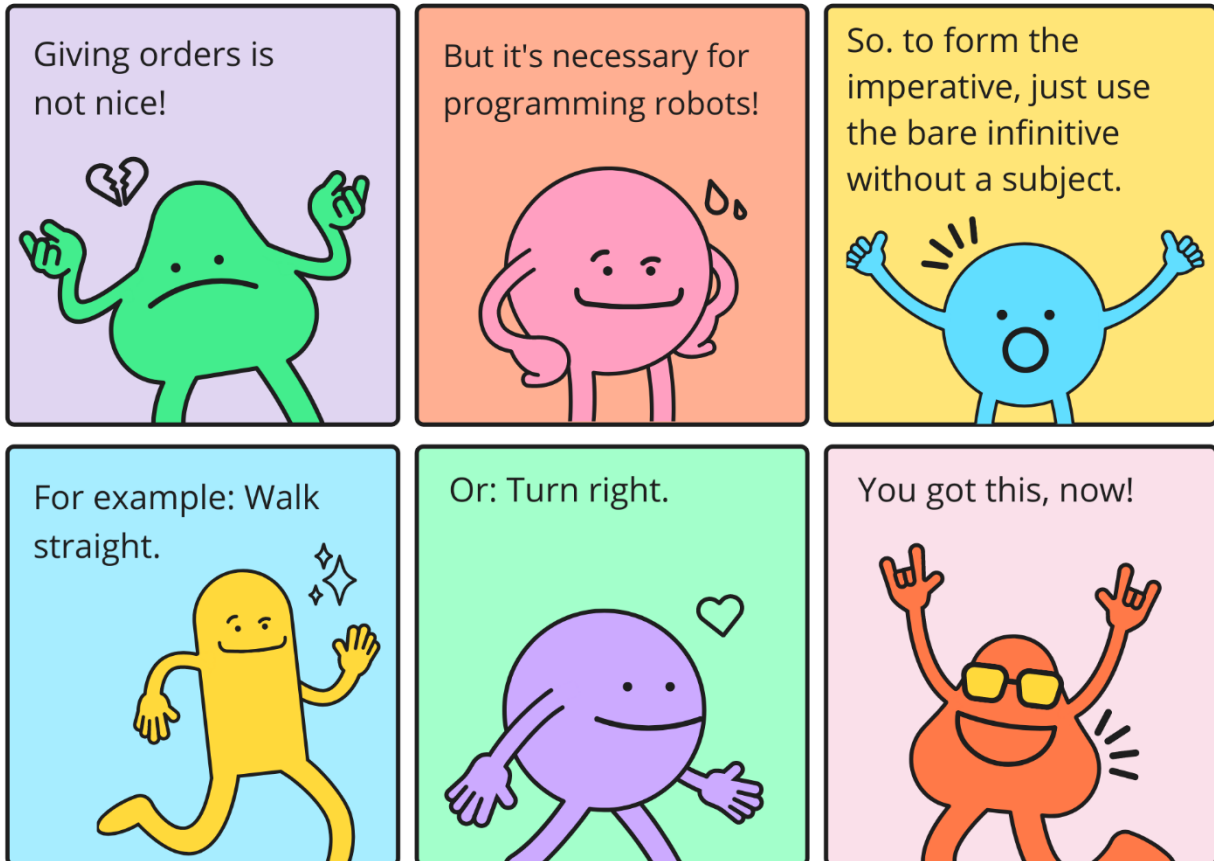
EXERCISE 2: Programming = giving order

To understand programming, we will imagine we are using the Bee Bot, a fun little robot that we can programme to navigate in space:
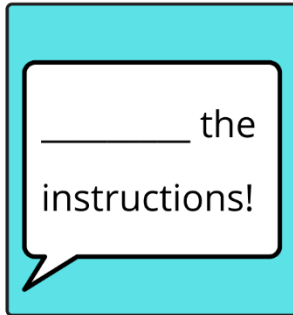
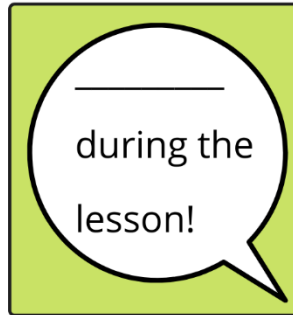Hello! I am the Bee Bot!
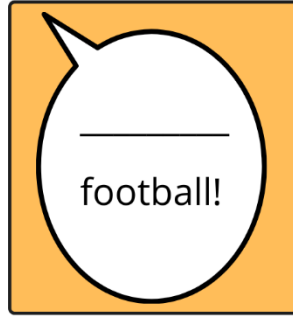
Let's get to programming!
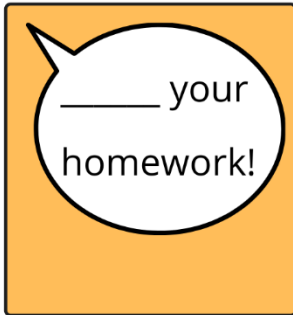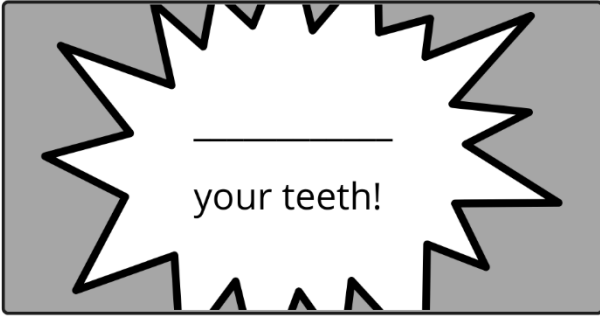
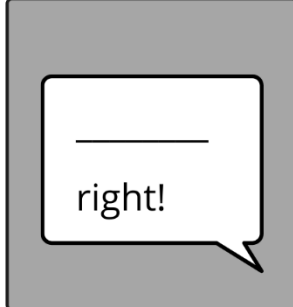To learn to programme this or any robot, however, you will need to learn to give orders. To give orders we use the imperative. See what the robot blobs have to say about the imperative:

ROBOT BLOBS

Giving orders is not nice!

But it's necessary for programming robots!

So. to form the imperative, just use the bare infinitive without a subject.

For example: Walk straight.

Or: Turn right.

You got this, now!

EXERCISE 3: Evaluation

Fill-in the comic clouds to form orders.

_____ upstairs!

_____ your homework!

_____ the instructions!

_____ during the lesson!

_____ your teeth!

____ the animals!

_____ football!

_____ late for school!

_____ off your mobiles!

_____ right!

EXERCISE : Evaluation

Imagine that the BeeBot robot has to go from A to B. Give it step-by-step instructions, using "go straight for [number of] boxes", "turn left", "turn right", "start", "end".

A					
			B		

III. Modification and Differentiation ideas

Ask students that finished early to give each other further instructions using the above grid.

IV. References

https://www.robot-advance.com/EN/cat-beebot-187.htm