

Inquiry lesson plan
Based on technology book
“I Robot
by Isaac Asimov”

Introduction

- ▶ Students are aware of the achievements of the impact of technology on human lives and apply their technical knowledge. Students will be able to develop XXI skills, such as scientific literacy, creativity, communication, collaboration, curiosity, initiatives, social and cultural awareness, engineering skills and programming.



Questions:

The 3 laws of robotics. Are they current? Could we add anything else?

- ▶ A robot may not injure a human being or, through inaction, allow a human being to come to harm.
- ▶ A robot must obey the orders given to it by human beings except where such orders would conflict with the First Law.
- ▶ A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws
- ▶ Then we discuss about loopy simulation
- ▶ <http://bit.ly/2qbtMHg>

They would be against mathematics or against the art of writing if they had lived at the appropriate time. (Evitable Conflict.179)

- ▶ We'll read the last chapter of Evitable Conflict and we'll look at how current it is today.
- ▶ Here we will identify knowledge of geography, history and technology from the book.

Making design activities

- ▶ Then we will split into groups and each group will have a robot to design.
First they will have to agree on the robot they are going to accomplish. How should it look? What does he have to do?
- ▶ In the framework of the lesson, the students will build a robot (with previous knowledge) inspired by what they choose and they will have to present and illustrate it.

We will use the Lego mindstorm kit

- ▶ <https://www.lego.com/en-us/mindstorms/build-a-robot>

Inquiry phase

- ▶ Then we'll introduce our robot and its features. Based on the Evidence chapter, we will discuss the ethical issues that can occur when building a robot.
- ▶ The technology may change—people in Asimov stories use slide-rules where we might use calculators—but many of the issues remain the same. Whether we're talking robots or cellphones or even basic things like fire, some people are going to be hopeful about progress and some people are going to be worried about it. And who's right? Well, that's the question Asimov looks at in this book.