In2steam Lesson Plan (Activity) Template

1. Name of the lesson	***MAKING PREDICTIONS***
2. Target group	Students aged 10-11 years old
3. Duration	90 minutes
4. STEAM Skills/ 21st Century Skills	Critical thinking Analytical skills Collaboration Problem solving 
5. Expected outcomes	By the end of this unit, students will be able to: • Make predictions while reading • Discuss the usefulness of making predictions in everyday life • Understand cause and effect • Formulation of hypotheses, following the scientific method
6. Subjects and topics covered	Scientific method; arts and the colour spectrum
7. Methodologies	Scientific method Inquiry based learning
8. Integration of the Arts	Arts can be integrated during the exercise as predictions can be made on natural phenomena such as the rainbow which therefore also concerns the genesis of colors in contact with light etc. and the whole spectrum of colors, from warm colors to cold colors
9. Learning Environment	Classroom
10. Required resources	This lesson will use the "Cause and Effect Exercise" and "Making Predictions Graphic Organizer" Worksheet. Required resources: • Paper • Pencil/pens • Some photos (e.g a blue sky with a rainbow)
11. Prior knowledge **a. teacher** **b. students**	In order to deliver this lesson, the teacher will need to have the following knowledge and skills set: • Be familiar with the scientific method, specially hypothesis making.
12. Detailed description of the step-by-step sequences of the unit, incl. specific activities to support the learning experience	STEP1: • In order to introduce the hypothesis making process, we can start asking students about the last time they watched a movie or they read a story. Ask them: "What did you imagine happens to the characters? How did you understand that? Explain your prediction process" STEP 2:

	• Ask students to predict something based on real life. You can ask students to discuss together about some natural phenomena, such as the rainbow appearing after the rain: *"When it rains look for rainbows, when it's dark look for starts"* Oscar Wild)  STEP 3: • Break the class into pairs or small groups. Each group will receive a picture/a photo and will observe it to make predictions. You can choose the photo of a rainbow or different photos to be attributed to each group. • Ask each group to make 2-3 predictions. Students can reason by making two columns where in one they will write the causes and in another the effects. Obviously, if students don't know exactly the scientific nature of the phenomenon, then predictions will be based on their own creativity, imagination as well as on their intuition. • Ask students to explain their predictions and come out with some conclusions STEP 4 • As teacher, you will illustrate the phenomenon to the pupils (explain them what it is really happening or will happen), so as to confirm or deny the prediction made by them. You can give an artistic touch to your activity e.g. ask your students to draw a rainbow themselves or look at the rainbow outdoors after a rainy day and observe the shades. You can also reproduce the rainbow through a simple experiment with a basin of water, a mirror and a blank sheet of paper.
13. Gender-inclusive strategies and activities planned	Make sure boys and girls are evenly distributed across the groups; when listening in ensure that all children are actively involved in the groups; avoid stereotypes
14. Assessment & Evaluation	Group reflection: 1) What happens when you make good decisions? 2) What should you do if there is a bad effect because of a choice you made? 3) How can you use predictions in your daily life?
15. Intellectual property rights (IPR) / Origin of the activity	Lesson planned adapted from: Education closet