

# SCRIPT FOR SURVIVAL GAME

development | Anna Zatwarnicka (District School Complex No. 3 in Wejherowo) in cooperation with the Experyment Science Center in Gdynia

## INTRODUCTION

age of participants	13 - 18 years
form of classes	group work, public presentation at the knowledge marketplace
duration	preparation of students (time is determined by the teacher), public presentation in the class forum 45 minutes

# SUBJECT

During an tour based on a game at the Experyment Science Center for the area of survival, teenagers learned how to survive in difficult conditions. During the game groups crash and end up on a deserted island where they have to complete a series of tasks to escape. The route of the path was based on a scavenger hunt and related to the natural sciences. Student left alone on a deserted island had to cope with difficult conditions. He was forced to think creatively. All actions taken by the student in a specific position had to be conscious and responsible, because the result of his work will be escape from the island.

Summary of the trip takes place at the school during the so-called knowledge fairs. Young people at the Experyment Science Center were divided into six groups: scouts, medics, supplies, watermen, ranger and hunters. Each group was tasked to carry out a project related to survival on the island, e.g. acquiring food, orientation in the field, giving first aid, acquiring water, moving in difficult terrain, etc.

Each group was to prepare and share with other groups their knowledge gained during the tour. The survival path is based on the game and it was created in the Action Track app.

## **GENERAL GOALS**

- activities aimed at awakening students' interest in natural sciences,
- enabling students to discover knowledge about survival in difficult conditions in a non-standard way,
- expanding knowledge about survival,
- a thought experiment concerning the way of human behavior aimed at gathering knowledge and skills related to survival in difficult conditions,

#### SPECIFIC GOALS

- attractive and creative learning about survival,
- enriching knowledge from specific thematic circles in physics, chemistry, biology and geography,
- working with the problem methodology,
- improving the ability to search, select and use information from various sources, as well as appling it in new tasks of a practical or theoretical nature,
- comprehensive activation of students in the learning process,
- acquiring teamwork skills,
- shaping social competences.

#### **DESCRIPTION AND COURSE OF CLASSES**

PART I.

#### **1. INTRODUCTION**

During the short introduction, students learn that, using the knowledge acquired during the game at the Experyment Science Center, needs to be used in developing a presentation of information gathered during the survival path in their groups.

#### 2. ASSIGNMENT OF TASKS AND PLANNING

The presentation of the information learned during the path at the Experyment Science Center needs to be presented in an artistic form (poster, poster, mock-up, etc.). In addition, students also prepare a business card with the name of their group and each participant brings a small sweet (candy, bar, wafer, lollipop, etc.). During so-called knowledge fair participants will be able to share the acquired information with other students. They will create workstations that other students will approach in order to get a pass and complete the worksheet. The teacher sets the time limit to prepare a fine arts product.

The teacher reminds individual students what they have to pay attention to while preparing artworks.

MEDICALS handled first aid. Their goal was to get acquainted with:

- principles of cardiopulmonary resuscitation
- rules for using the AED

• the correct way of calling for help by 112 (and which information should we include while calling)

<u>SCOUTS</u> handled moving in difficult terrain. Their goal was to get acquainted with: • earthquake mechanism and basic concepts: epicenter, hypocenter, tectonic plates, Richter scale

- what to do in case you get stuck in "quicksand"
- features of non-Newtonian fluids
- structure, functions and formation of red blood cells

<u>SUPPLYERS</u> handled acquiring food. Their goal was to get acquainted with:

- alkaloids in food sources, applications and activities discussed
- nutrients (proteins, fats, carbohydrates, dietary fiber) sources, role in the human body

• atmospheric pressure - definition, changes depending on the height (mountain) / depth (ocean)

<u>WATERKIERS</u> handled obtaining water. Their goal was to get acquainted with:

• osmosis - discussion of the phenomenon, giving examples

• later discussing the cooling mechanism of the body, giving examples of thermoregulation in animals

• principles of operation of carbon filters - overview, application examples

<u>RANGRES</u> handled orientation in the field. Their goal was to get acquainted with: • natural methods of determining the northern direction in the field

<u>HUNTERS</u> handled identification and recognition of animals. Their goal was see:

- identification of birds by their profiles
- recognizing animals by sounds
- how different animals view images.

# PART II (lesson)

1. PRESENTATION OF WORK EFFECTS - SUMMARY (proposed duration: 30 minutes)

Before the lesson, the teacher prepares suitable classroom. He arranges the tables (six stands) in the shape of a circle (they are to symbolize fair stalls).

The final stage is public presentation of all groups work. At the beginning of the lesson (efficiently max. 3 minutes), students place on their tables nametag of the group and previously prepared art works and materials which will include information obtained on the track.

Two people from each group receive a worksheet and have 10 minutes to go through all positions (except their own) and find the answers to the worksheet. The answers are written in the appropriate places on the cards. After time is up, they hand over to the

teacher the completed worksheets and return to their fair stalls. The next two people with other worksheets, like their predecessors, start searching for information, going through individual positions within 10 minutes. If the groups consist of more than four people, we suggest another round.

## PART III

**1. LESSON SUMMARY** (proposed duration: 8 minutes)

After all the students turn pass, the teacher praises the groups for solid and diligent preparation of the stands. Rewards and distinguishes with a kind word those fair stand which students have put a lot of time and work into their artwork.

The tutor asks the participants of the knowledge market to reward for 'sold' knowledge (pay in the form of sweets). He asks each student to reward the position (put a sweet on the table of this group), which in his opinion best presented the news and 'sold' the most knowledge.

It is suggested to organize an exhibition of student fair stands for the wider school community. Each team can exhibit its stand in a designated place in the school.

The script was developed as part of the "Science Inspired" project carried out by the Experyment Science Center in Gdynia in cooperation with Agora Science Center (Hungary), VIDA! Science Center (Czech Republic) and Noesis Science Center and Technology Museum (Greece). The project is co-financed by the Erasmus + program of the European Union, Action 2: Strategic Partnerships for Youth.



