

### INTRODUCTION

Explore the Sea Life is a HEADU educational game. The Headu system allows development-aged children to play, learn and develop intelligence skills that they will use throughout their lives. Explore Sea Life is a game designed to expand scientific thought, to help children develop a "scientific mentality." Having a scientific mentality means trying to understand the origin and nature of things.

This activity starts with an accurate, sometimes measured observation of the phenomena, in this case, nature. Observation is actually the starting and ending point of a scientific idea. Children can learn from an early age to study phenomena, in this case the world under the sea, and classify them. Children learn that by observing and recording data, they can formulate ideas: which marine animals are found on the sea floor? How common are they?

#### **STEM Educational Games**

Explore the Sea Life is a STEM educational game. S.T.E.M. is the acronym of Science (Science), Technology (Technology), Engineering (Engineering) and Mathematics (Mathematics) coined by the National Science Foundation in the early 1990s.

STEM toys bring children closer to these subjects thanks to their functionality and simplicity of understanding. They are not just toys, but real, useful tools for learning.

These products help children develop their skills, as well as making education a creative, engaging experience. They present the perfect combination: learning while having fun.

## The right attitude

The role of the parent-educator is essential for understanding the enormous potential of children and creating a favorable environment around them, where they can play in a natural, joyful and spontaneous way. It is important to listen to children, understand their needs and state of mind, being ready to listen to them and show confidence in their abilities. A positive attitude is fundamental to achieving any goal.

### **EXPLORE THE SEA LIFE**

# Who is the game for?

This game is designed for children 5-10 years old.

At this age, children want to explore and do things by themselves in close-contact with the environment.

## How to introduce the game to your child

To play the game, it is necessary to find a suitable environment, a quiet area free from distractions. Furthermore, it is important to allow children as much time as necessary to complete the game, encouraging concentration. Every child has their own speed of learning and it is the task of the parent-educator to understand and respect this rhythm.



#### **Contents**

The kit includes: a 70-piece puzzle 60x44, a special flashlight, a dry-erase marker.

## **Educational objectives**

This game will help children develop a scientific mentality using precise, empirical observations. They discover the magic of the sea floor and all the marine animals that live there. It also develops:

- **memory** and the **ability to observe**, through which they can identify how many times a marine animal is repeated in the illustration.
- **concentration**, as the playful context is able to attract children's attention to explore and learn about the "inhabitants" of the sea.
- **curiosity**, which allows children to be inspired to learn and make many discoveries about the magic of the sea.
- **creativity** and **imagination**, using the semi-realistic illustrations that cast children into the world under the sea imagining that they live in it.
- **autonomy**, through freedom of observation to do research in close contact with the environment.

# Intelligences involved

This educational device uses Howard Gardner's theory of Multiple Intelligences as references, according to which from the moment of birth, each person has more than one way of thinking, multiple *formae mentis*, relatively independent of each other. The game encourages children to develop some of Gardner's intelligences:

- **spatial intelligence**, consisting of knowing how to recognize the relationships between objects in the environment and knowing how to use visual memory;
- **naturalistic intelligence**, allowing people to show a particular interest towards important natural phenomena and towards the life of marine fauna;
- **corporeal-kinesthetic intelligence**, or a wide-ranging ability to manipulate objects and in hand-eye coordination;
- **logical-mathematical intelligence**, allowing people to classify and synthesize information through inductive reasoning.

## SUGGESTED ACTIVITY: KEEP YOUR EYES PEELED!

Explore the Sea Life is a puzzle set in a coral reef: a sea filled with sharks, starfish, seahorses, fish and obviously coral: but also divers and masks. It is rich, colorful puzzle with semi-realistic illustrations to help children get accustomed to scientific research and empirical observation by discovering the beauty of the sea floor and much more.

What is hiding on the sea floor? Dress up like an underwater diver and set off on an adventure to a coral reef. In the package, you will find a rich kit which children can use to really get into the role.

### How to play

After putting the puzzle together, the player, immersed in marine fauna, heads off to find fish, sharks, turtles and many other animals. Using the notebooks included, they can write down how many times they encounter a certain subject or object in the illustration and in this way, confirm their research. There are four notebooks available, each designed with the image of the subject on them plus eight empty circles to be checked off as the player encounters the corresponding subject in the puzzle. There are always eight circles even if a subject may appear more often, as this will stimulate the child to research and observe more closely.



Be careful, as some details are not visible to the naked eye but only by using the magic flashlight found in the kit. These details are also present in the notebooks, so the child must look for them carefully and check them off with the erasable marker.



Your mission to the coral reef has been a success!

