

DISCOVER THE UNIVERSE WITH PIPO

HAVE FUN AND LEARN WHILE TRAVELING THROUGH SPACE

ÍNDICE



www.pipoclub.com

Check Pipoclub on the Internet for up-to-date information about the collection.

Free games!



SAVE THE FORESTS!

Pipo recommends that you don't print the whole guide unless it is necessary.

General introduction	2
Introduction to "Discover the universe with Pipo".....	2
For parents and teachers	2
To start	3
Summary.....	5
Configuration	5
TOPIC 1. The constellations	6
How to find the constellations (<i>explanation</i>).....	6
The signs of the Zodiac (<i>explanation</i>).....	7
Stickers of the Zodiac	7
Place the Constellations.....	7
Find the Constellations.....	8
Join the stars.....	8
Puzzles.....	9
The astronomer's test.....	9
TOPIC 2. The rotation of the Earth	10
Geometric concepts (<i>explanation</i>).....	10
Stickers of geometric concepts	10
Find geometric concepts	11
Night and day	11
Make pairs.....	11
Color the picture	12
TOPIC 3. The Moon	12
The tides (<i>explanation</i>).....	13
Solar eclipses (<i>explanation</i>).....	13
Lunar eclipses (<i>explanation</i>).....	13
The visible face of the Moon (<i>explanation</i>).....	13
Land the spaceship	14
The phases of the Moon	14
TOPIC 4. The Earth's orbit	14
The seasons	15
The calendar of the seasons.....	15
The calendar of the months	16
The puzzle of the months	16
TOPIC 5. The Solar System.....	16
The Sun (<i>explanation</i>).....	17
The parts of the Sun.....	17
Cards of the Sun.....	17
The planets of the Solar System (<i>explanation</i>).....	18
Stickers of the planets.....	18
The photos of the planets.....	18
Stickers of the Solar System	19
TOPIC 6. The Oort cloud: comets, asteroids and meteorites. .	18
Showers of shooting stars (<i>explanation</i>).....	19
Cards of shooting stars.....	20
The parts of a comet.....	20
TOPIC 7. The Galaxy.....	20
Lives of the stars (<i>explanation</i>).....	21
Life and death of a star	21
Types of galaxies	21
TOPIC 8. The Universe	22
Types of stars (<i>explanation</i>).....	22
Stickers of types of stars	22
The size of the universe.....	22
The astronomer's notebook.....	23
TOPIC 9. Hints and tips for young astronomers	23
Stickers of hints and tips.....	23
Find hints and tips	24
TOPIC 10. Spaceships	24
Build spaceships.....	24
TOPIC 11. Notes on the history of astronomy.....	25
Historical people and events.....	25
Scores	25
Credits	27

GENERAL INTRODUCTION

www.pipoclub.com

CHOOSE THE MOST
APPROPRIATE FORMAT:

CD-ROM
ONLINE
DIGITAL/DOWNLOAD

SCHOOLS

Pipo offers license deals for schools. Learn and have fun with your classroom friends.

Pipo is a collection of education games on CD-ROM that, through their presentation and the creative way they treat different themes, quickly capture children's interest.

The software build up different areas of the school curriculum and the skills necessary for children's learning and development.

They have been created and coordinated by child psychology professionals, including contributions from teachers and specialists in each area. Clear, simple and very stimulating, they aim to let children work through the activities by themselves at their own pace and learn through play, encouraging and stimulating intuition, reasoning, creativity...

Although the child sees these games as just games and has fun trying to solve them, from a pedagogical point of view, each one delivers a specific set of learning goals for children.

They cover an extensive range of ages, going from 2 years old up to 8, 10 or even 12 years old. Children move forward at their own personal learning pace, depending on their age and prior knowledge. Some programs also include the possibility of regulating the level of difficulty. These have proved to be very useful for children with learning difficulties or in special education.

DISCOVER THE UNIVERSE WITH PIPO



Discover the Universe with Pipo is a program that takes children on a voyage through space in a simple, fun and hands-on way. In Pipo and Cuca's spaceship they take off from Earth to go to the Moon, the Solar System, the Galaxy and the furthest limits of the Universe to discover the secrets of the stars.

It is aimed at children between **5 and 12 years**. Nevertheless, the easier levels of some of the games will be very satisfying for **4 year** olds, especially the puzzles, match pairs, join-the-dots, or coloring activities. Other activities can be useful for **adults** who want a very simple introduction to astronomy. This product can be adapted according to the ages, needs, and capacities of the users.

The program is structured into **55 different activities** and broken down into **11 topics**, each with experiments and information to help the user understand astronomy: the constellations, the rotation of the Earth, the Moon, etc.

These topics are grouped into **2 sections: the zoom panel** (which covers the first eight topics) and **the Astronomer's notebook** (which covers the last three topics).

The **duration** of each game varies according to the speed of learning and the motivation of the child. In addition, some games have various **levels** of difficulty. There is no time pressure and the child can interrupt and leave the game at any time.

The games are very **stimulating** and capture the child's interest quickly. Even where the learning content may be more advanced, the child can still have fun with the games and will gradually absorb the contents and the skills.

FOR PARENTS AND TEACHERS

LANGUAGES



Pipo is designed so that the child can interact with the computer as if it were a toy. It is very important that the child is free to explore and investigate, discovering all the possible options of the game for themselves, as this is more motivating and interesting and the child learns more.

The game offers the possibility of playing in **three different languages**: Spanish, English and Catalan, in this way allowing the child to have a basic knowledge of other languages apart from their own. For the very small up to four years old it is recommended for them to play in their own maternal language or at least until they

become familiar with the game. It is especially useful for children who are learning a second language.

The games **count the hits and misses**: the points are important as they serve as an incentive to motivate the child to continue playing, making them try harder to improve their learning, but you must keep in mind that they are not significant in themselves.

The majority of the games have various **levels of difficulty**, which allows children, parents and users to adapt the game to the user's degree of learning and to move up the levels as they grasp the contents.

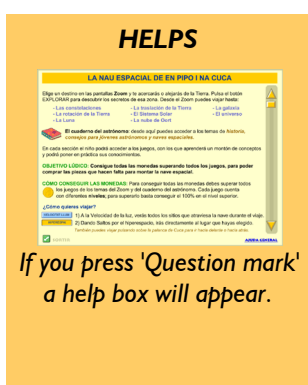
This new edition of the product contains the new **learning objective** (see page 24). This motivates children a lot as they can see their progress in a fun way.

We recommend that the child does not try the "Astronomer's test" more than once a day since it is not good to spend more than one hour in front of the computer (depending on the age of the user we advise a maximum period of between 30 and 60 minutes).

HELP BUTTON

In all the games you can press on the 'Question mark' key to get a summary of how the game works. You can also go at any time to General Help. This consists of the following parts:

- How does the program work.
- Games.
- General.
- Tips for learning.



TO START

Once you insert the CD, the program will ask you if you want to see the **demos**, the **learning guide**, or **start playing**.



The child should write his or her name twice to avoid errors.

Help. Gives a brief rundown of the functions of the game, from here you can access the general helpline where you can consult useful guidelines for parents and teachers.

Summary. A general visit to all the contents.

Languages. You will be able to change language and play in Spanish, Catalan or English.

A visual up-date of the child's **progress**.

Access to the **configuration** screen.

To leave the product from any place and any time:

Windows users: click **Alt + F4** at the same time.

Mac users: click the **Apple symbol + Q** at the same time.

PIPO AND CUCA'S SPACESHIP

Once you press **"PLAY"**, you will go to **Pipo and Cuca's Spaceship**. The player's mission is to explore the Universe.



Zoom Panel: select the topic you like best to start.

"Explore" button: to go to the selected topic.



How do you want to travel?

Lightspeed:

you can see yourself moving away

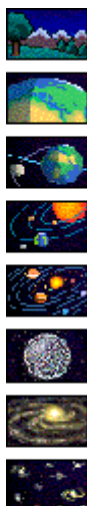
Hiperspace: faster.

Astronomer's notebook.

TOPICS OF DISCOVER THE UNIVERSE

The program is divided into 11 topics. Once you have chosen the topic, you go to the main explanation of that topic with the relevant games and interactive activities where you can put your knowledge into practice.

From the Zoom Panel you can access these first 8 topics.



From the Astronomer's notebook you can access the last 3 topics.



1. Constellations

Northern and Southern Celestial Hemispheres, the Zodiac.

2. The rotation of the Earth

Day and night, geometrical concepts.

3. The Moon

The visible face of the Moon, tides, eclipses.

4. The Earth's orbit

The seasons and the calendar.

5. The Solar System

The Sun and the planets.

6. The Oort cloud

Comets, asteroids and meteorites.

7. The Galaxy

The Milky Way, types of galaxies, the life and death of a star.

8. The Universe

The size of the Universe, types of stars, and other bodies in the Universe.

9. Notes on the history of astronomy

Brief history of well-known people and some amazing facts about astronomy.

10. Hints and tips for young astronomers

Hints and tips to help your observations of the night sky.

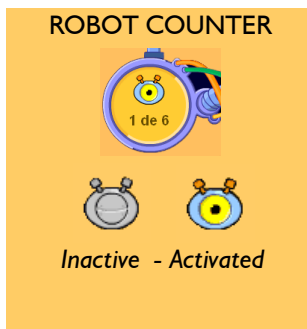
11. Spaceships

A summary of the most important spaceships.

THE ROBOTS

In all the screens of the game you will meet the reconnaissance robots. You will need to activate them, as at first they are inactive. To activate them, click on them one by one and listen to the information they give. You must listen to all the explanation for them to stay activated.

We suggest you activate the robots in the sequence suggested by the program so as to introduce the new concepts in the clearest way. First find the robot that is



If you are not familiar with the basis concepts, we recommend that you listen to the robots before playing, though it's not compulsory.



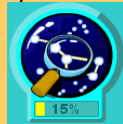
Click on the box to make it disappear.

DIPLOMA BUTTON



EXPLANATION BUTTON

The porthole buttons take you to screens with extra explanations.



COINS AND PIGGY BANK



You will receive a coin for each level you solve.

moving and listen to all that it has to say. Then continue with the next one that is moving. When you click on a robot an explanation box will appear in the lower part of the screen. Click on this to make it disappear or click on another inactive robot.

The number of robots you have activated in each screen will determine whether or not you can play the "Astronomer's Test" for that topic. The default setting is that you must activate 90% of the robots to play the Test. You can change this value in the configuration screen (check at the end of the page.).

Some robots also have videos with examples.

Concept that is explained by the robot.



Listened robots counter

"Diploma" button (printable) and "piggy bank" button.

Topic Diploma: when you have solved all the activities of the topic (games and explanations) you will receive the diploma of the topic. The diploma includes the date on which you received it, which will be shown when you print it.



HOW TO GET MONEY

To get money you have to solve 100% of each game. For each level you solve, you will receive one coin.

You can store all the money you get as you solve the different levels of the game in a piggy bank. You can click on it to go to the orbit shop.

SUMMARY

Here you will get a global overview of the whole product.

Click on the arrows to see the different topics.

Scores.

Configuration.

Exit.



Brief explanation of each game.

Access to PIPOCLUB.COM

CONFIGURATION



Key for quick access to configuration. Only windows users.

Clicking the **configuration button** takes us to the configuration screen where you can change the following things:

NORTHERN OR SOUTHERN HEMISPHERE

Choose the default setting for the Hemisphere: North or South. This affects the following games: find the constellations, orbit, seasons and calendars .

ROBOTS

The number of robots needed in each topic to play the Astronomer's Test. The default setting requires you to activate **90%** of the robots to be able to go to the Astronomer's Test. However, you can change this figure whenever you want.

PIPOCLUB.COM

Option to connect to the Internet: To allow or not the connection to Internet to visit www.pipoclub.com.

PRINTER

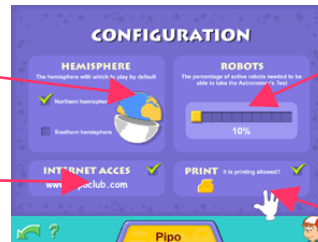
You can also activate or deactivate the printer. If you don't want to print the diploma or the score screen, deactivate the button.

To avoid young children using the button by mistake we recommend that you only turn it on when you need to.

Remember that to save our planet you should use as little paper as possible.

Here you can change the Hemisphere in which you are playing.

Internet access.



Here you can set the number of robots required (in each topic) to access the Astronomer's Test.

Are you allowed to print?

TOPIC 1: THE CONSTELLATIONS



"Hemisphere" button:
to change the hemisphere (North or South).



"Telescope" button:
To see the constellations in a clear and fun way.



"Lines" button:
to hide or show the imaginary lines that form a constellation.



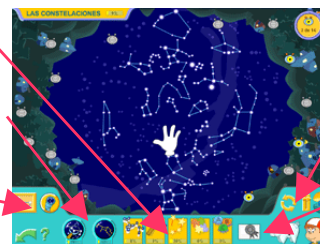
"Rotation" button:
to rotate the celestial sphere so you can see how the stars move.

Main explanation: in this screen the robots will show you everything you need to know about the constellations. First click on the robots in turn and listen to their explanations. Then play the games on this topic.

Rectangular buttons: games.

Rounded buttons:
access to additional explanations.

"Lines" and "telescope" buttons.

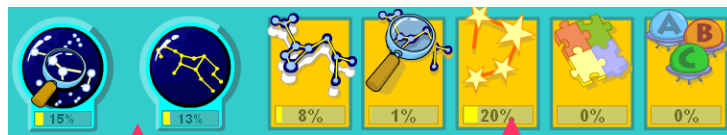


"Hemisphere" and "rotation" buttons.

"Diploma" button and "piggy bank" button.

Topic Diploma: when you have solved all the activities of the topic (games and explanations) you will receive the diploma of the topic, which you can print.

TOPIC ACTIVITIES:



Extra explanations:
how to find the constellations and the signs of the Zodiac.

Games (from left to right):
stickers, find the constellations, join stars, puzzles and the astronomer's test.

HOW TO FIND THE CONSTELLATIONS

MENU



Choose the constellation you want to see.

A check mark shows the already seen constellations.

Extra explanation: Pipo gives advice on how to find the constellations that are the easiest to recognize in the night sky. Each robot explains how to find one constellation. You can click on the names or click on the robots.

Look here in order to orientate yourself when you look at the sky.

Vault: this shows you whether the constellation is in the northern or southern celestial Hemisphere.



Click on the robots or their names to hear the explanations.

"Arrows" buttons:
to see other constellations.

THE SIGNS OF THE ZODIAC

Extra explanation: Did you know that there is a constellation for your Zodiac sign? There is one for each month of the year. Here the robots and Pipo tell you interesting things about the Zodiac and the constellation model for each month.

Click on the robots to hear Pipo's explanations.



Move the mouse over each constellation and you will see the month to which it corresponds.

STICKERS OF THE ZODIAC

SKILLS

Image association
Visual memory
Visual distinction
Hand-eye coordination
General spatial perception
Concentration and attention

Learning aims:

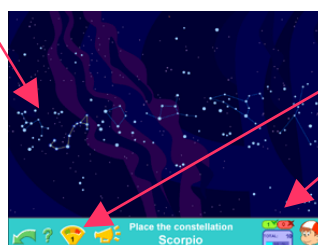
To remember the constellations of the zodiac.

Use pictures to help with remembering their shape and place.

How is it played?

You have to place the constellations that Pipo names in their corresponding place.

If you move the mouse to the left or right edges of the screen you can access more constellations, to find the one you are looking for.



"Level" button.
Hits and misses.

There are **4 levels** in this game:

Level 1: You have to match six nearby constellations. When you find yourself in the same zone, you mustn't move the background. You can use the silhouettes and the names to help you.

Level 2: You have to match 12 constellations in fours. When you finish the 4, they will disappear and you begin again. To do this, you will have to move to the constellations beyond the margins. You still have the help of the silhouettes and the names.

Level 3: You have to match 6 nearby constellations you mustn't move the background. There is no help.

Level 4: You have to match 12 constellations in fours. When you finish the 4, they will disappear and you begin again. There is no help.

PLACE THE CONSTELLATIONS

SKILLS

Image association
Fine motor skills
Visual distinction
Recognition of shapes
General spatial perception
Concentration and attention

Learning aim:

Learning the constellations: their names, forms and locations.

How is it played?

Place the constellation in its appropriate place.

"Vault" button and
"rotation" button.

"Loudspeaker" button:
to repeat the
announcements.

"Level" button



"Life bouy" button.

Hits and misses.

There are **5 levels** in this game:

Level 1: With help. You see all the constellations and the 5 that you have to place are marked in blue.

Level 2: Same as before, but from this level onwards the sphere turns.

Level 3: Some constellations are marked to help you orientate yourself. Also, you can click on the "life buoy" button to see the rest of the constellations.

Level 4: The constellations are not marked, but you can still use the "life buoy" button to see them.

Level 5: The constellations are not marked and this time the life bouy button only shows a few constellations that you can use to orientate yourself.

FIND THE CONSTELLATIONS

SKILLS

Image association

Visual memory

Visual distinction

Hand-eye coordination

General spatial perception

Concentration and
attention

Learning aim:

Learning the constellations: their names, forms and locations.

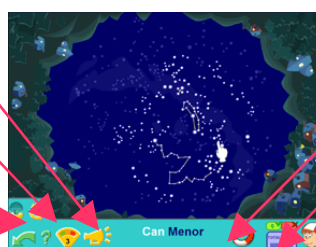
How is it played?

You have to find and click on the constellation requested.

"Loudspeaker" button:
to repeat the
announcement.

"Level" button.

"Help" button.



"Life bouy" button.

Hits and misses.

There are **5 levels** in this game:

Level 1: With help. You see all the constellations and the 5 that you have to place are marked in blue.

Level 2: Same as before, but from this level onwards the sphere turns.

Level 3: Some constellations are marked to help you orientate yourself. Also, you can click on the "life buoy" button to see the rest of the constellations.

Level 4: The constellations are not marked, but you can still use the "life buoy" button to see them.

Level 5: The constellations are not marked and this time the "life bouy" button only shows a few constellations that you can use to orientate yourself.

JOIN THE STARS

SKILLS

Visual distinction

Hand-eye coordination

Spatial orientation

Fine motor skills

Recognition of numbers
and numerical sequences

Learning aims:

Understanding the mythology and history of various representative constellations.
Recognition of numerical sequences.

How is it played?

Join the stars in order and you will discover the hidden constellation. There are 11 to make.

This helps you find the constellation in the sky.

Celestial vault:
this tells you whether the constellation is in the Northern or Southern Celestial Hemisphere.



"See the drawing" button: it shows you the mythological drawing of the constellation and Pipo will tell you its history.

"Loudspeaker" button

"Constellation" button: to choose the constellation you want to make.

THE PUZZLES

SKILLS

Spatial orientation

Visual perception

Discrimination and image association

Visual memory

Learning aims:

Strengthen attention span and concentration.

Increase perception and visual memory.

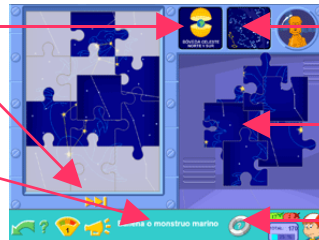
To make easier learning the constellations.

How is it played?

Complete the puzzle with the pieces on the right side of the screen. Select the one you want. Click on the piece to pick it up and click again on where you want to place it.

Hemisphere
"Arrow" button: to change the puzzle to make.

Name of the constellation.



This will help you find the constellation when you look at the sky.

You can pick up the pieces here.

"Life buoy" button.

There are **2 levels** in this game:

Level 1: Complete the puzzle fitting the pieces onto the gray background as help.

Level 2: Complete the puzzle. If you need help, click on the "life buoy" button.

THE ASTRONOMER'S TEST

SKILLS

Concentration and attention

Reasoning

Discrimination

Memory

Learning aims:

Develop reading skills.

Acquire and reinforce your understanding of the contents.

Learn to choose the correct response from different options.

How is it played?

Read carefully the question that appears in the sky and choose the correct answer from three options.

If you can't answer a question you can go back to the screen to look for the answer. Then you can return to the test to try again. If you get any of the questions wrong, it will appear again at the end of the test.

As you answer the questions correctly, the rocket will become ready for takeoff.

Question.

Answers.

Title of the topic and number of questions to answer.



TEST



Gray: inactive.
Color: ready to play.

When you first reach the main screen of the topic, the test button is gray. You cannot use it until you have listened to a certain number of robots. This is set at 30%, but you can change it on the configuration screen.

TOPIC 2: THE ROTATION OF THE EARTH

Main explanation: This is an explanatory screen about the rotation of the Earth. It covers important concepts such as: the Earth's axis, day and night, sunrise, sunset, the direction of rotation, etc.

Animation control panel: to make the Earth rotate, pause the rotation or go step-by-step to the left or right.

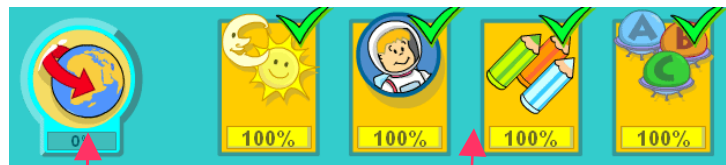


Listened robots counter.

Animation: sunrise and sunset at the lighthouse.

"Diploma" button and "piggy bank" button.

TOPIC ACTIVITIES:



Extra explanation: geometric concepts.

Games (from left to right): night and day, make pairs, colouring and the test (see page 9).

GEOMETRIC CONCEPTS

Extra explanation: Listen carefully to what Pipo tells you. You have to look for geometric concepts like the Northern and Southern Celestial Hemisphere, orbit, longitude, latitude, axis, the equator, spheres, parallels, circumference, the Northern and Southern Hemisphere, ellipse, poles... Understanding them will help you a lot because they appear in many topics.

Games: stickers of geometric concepts and find geometric concepts..



Listened robots counter.

"Piggy bank" button.

STICKERS OF GEOMETRIC CONCEPTS

SKILLS

Image association
Fine motor skills
Visual distinction
Recognition of shapes

Learning aims:

Understand the concepts that appear through the topics and reinforce your learning.

Helps build up new vocabulary with the help of pictures.

How is it played?

Take the stickers that appear at the right of the screen moving the mouse over it and then stick it in the correct place. To drop it, click again on the correct place. When the geometric object appears, you will hear a short explanation on what it is.

"Loudspeaker" button: to repeat the announcement.

"Help" button.



Seeing images in gray is a help.

FIND GEOMETRIC CONCEPTS

SKILLS

Image association
Visual and verbal memory
Visual distinction
Hand-eye coordination

Learning aims:

Distinguishing the concepts that appear through the topics.
Develop attention span, memory and concentration.

How is it played?

Listen carefully to what Pipo is asking for and help him to find it.

When the geometric object appears, you will hear a short explanation on what it is.

"Loudspeaker" button:
to repeat the
announcement.

"Help" button.



Click on the concept
requested.

There are **2 levels** in this game:

Level 1: You have to click on the concept requested. To help you there are five images in color, the rest are in gray.

Level 2: You have to select the concept requested, but without help. All the images are in gray.

NIGHT AND DAY

SKILLS

Visual memory
Hand-eye coordination
Spatial orientation
Abstract reasoning
Conceptual understanding

Learning aims:

Distinguishing sunrise, sunset, Northern and Southern Hemispheres, the tropics and equator.

Know where to place objects according to the concepts of the topic.

How is it played?

You have to select the vehicle Pipo ask you for and find it on the globe .

Click on the cameras
to change the point of
view with which you
see the Earth at any
given moment.



There are **3 levels** in this game:

Level 1: You play with the concepts: sunrise, sunset, night, and day.

Level 2: You play with the concepts: Northern Hemisphere, Southern Hemisphere, and the equator.

Level 3: You play with the concepts: tropic of Cancer, tropic of Capricorn, North Pole, South Pole, and the equator.

MAKE PAIRS

SKILLS

Image association
Visual memory
Visual distinction
Hand-eye coordination
Graphic spatial perception
Concentration and attention

Learning aims:

Develop memory, attention span and concentration.

Associate the words with his pictures..

How is it played?

Click on the windows of the spaceship to uncover them and discover the pictures. You have to look for matching pictures and make pairs. Two people can play. The one who has the most lightbulbs lit up wins.

The concepts that appear are different depending on the topic.

Click on the windows
to make pairs.
"Level" button.



Each time that you
match a pair a light bulb
lights up.
The one who has
the most lightbulbs
lit up wins.

There are **2 levels** in this game:

Level 1: You have to match only 6 pairs.

Level 2: You have to match 9 pairs.

COLOR THE PICTURE

SKILLS

Concentration and
attention

Association and
recognition

Fine motor skills

Hand-eye coordination

Color discrimination

Learning aims:

Recognise the colors (by sight and sound).

Stimulate the artistic capacity of the child.

How is it played?

Consists in colouring in the scene. You must click on the colour you want to use to colour in and then click on the part of the drawing you want to color.

The characteristics of this game, make it very suitable for the smallest children.

"Printer" button.

"Eraser" button:
to begin again.



Arrows: to change
the drawing.

Pencils: Select the color.

TOPIC 3: THE MOON

Main explanation: In this screen Pipo will show you all the aspects essential to understanding the Moon: its phases, the force of gravity, the surface... as well as explanations of tides, eclipses, and lunar landings.

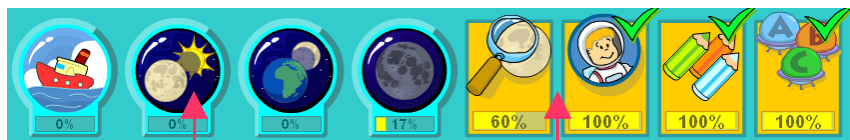
Animation control panel:
to start the Moon moving
(Play) or stop it (Stop)
and see how the Moon
travels around the Earth.



Here you can see the
different phases of the
Moon.

We advise to activate the
robots before playing the
games on this topic.

TOPIC ACTIVITIES:



Extra explanations:
tides, solar eclipses, lunar eclipses
and the visible face of the Moon.

Games (from left to right): phases of the Moon,
make pairs (see page 11), colouring (see page 11)
and the test (see page 9).

THE TIDES

Extra explanation: Do you know what a tide is and where it comes from? When they happen and why? And the difference between spring tides and neap tides? Activate the robots and listen to Pipo's explanations.

Here you will see a high or low tide, by night and by day.

"Help" button.



Robot counter.

SOLAR ECLIPSES

Extra explanation: In this screen Pipo will explain all the essential concepts needed for understanding solar eclipses: the definition, types, duration...

Animation control panel: to make the Moon move (Play) or stop it (Stop). Watch how the Moon hides the Sun and causes its eclipse.



The camera shows us how the different stages of a solar eclipse looks from the Earth

LUNAR ECLIPSES

SKILLS

Visual memory
Hand-eye coordination
Spatial orientation
General spatial perception
Fine motor skills

Extra explanation: In this screen Pipo shows you all the essential concepts you need to know about eclipses of the Moon: the definition, frequency, duration and the red Moon.

Animation control panel: to make the Moon move (Play) or stop it (Stop) and watch how the Earth hides the Moon and causes a lunar eclipse.

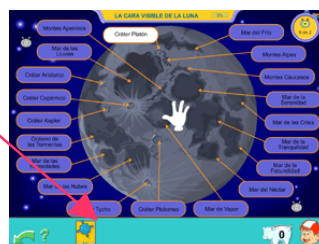


The camera: shows us how the different stages of a lunar eclipse looks from the Earth.

THE VISIBLE FACE OF THE MOON

Extra explanation: Pipo shows us the different regions of the Moon in this screen. The dark regions are called seas even though they don't have any water: they are flat areas with very few craters. The brighter areas are craters. We also know some of the mountain ranges on the surface of the Moon.

Game: to land the spaceship.



LAND THE SPACESHIP ON THE MOON

How is it played?

You have to land the spaceship on the appropriate part of the Moon. There are 2 modes of playing the game:

Mouse mode: you have to click on a zone to land.

Keyboard mode: you use the controls of the screen or, even better, the computer keyboard: the arrows to steer the spaceship and the space bar to land it.



There are **4 levels** in this game:

Level 1: The 8 most well-known zones; they are marked with lights on the surface of the Moon.

Level 2: The same zones as in level 1, but without the markings.

Level 3: All the zones; with the lights help.

Level 4: All the zones, without help.

THE PHASES OF THE MOON

SKILLS

Visual memory
Hand-eye coordination
Spatial **orientation**

Learning aims:

Learning the different stages and phases of the Moon.

How is it played?

You have to click on the Moon that is in the phase that Pipo tells you.



There are **3 levels** in this game:

Level 1: You have to play with only the four most important phases of the Moon: new, developing crescent, full, and closing-down crescent.

Level 2: As well as the four previous phases, you now play with the gibbous and crescent Moons. You still have the help of the camera.

Level 3: You have to select the Moon that is found at the beginning, end, and during a lunar eclipse, the developing crescent, the closing-down crescent, or at the beginning, end, and during a solar eclipse. You have the help of the camera.

Nivel 4: You revisit the concepts from level 2 without help.

Nivel 5: You revisit the concepts from level 3 without help.

TOPIC 4: THE EARTH'S ORBIT

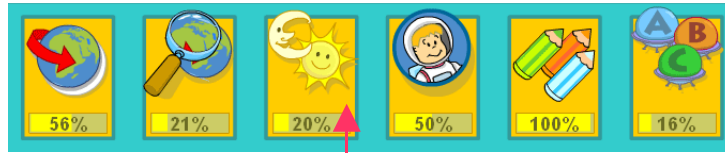
Main explanation: In this screen Pipo shows you all the important features of the Earth's orbit and the seasons: their origins, spring, summer, autumn, winter, the equinox and solstice.

Here you can see the months and the seasons for the Hemisphere in which you are playing.



Listened robots counter:
Animation control panel: to make the Earth go around the Sun or to stop it. To see it go step-by-step, use the side buttons.

TOPIC ACTIVITIES:



Games (from left to right): find the seasons, the calendar of the seasons, the calendar of the months, the puzzle of the months, make pairs (see page 11), colouring (see page 11) and the astronomer's test (see page 9).

THE SEASONS

Learning aim:

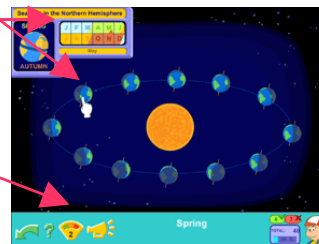
Relate the movement/rotation of the Earth to the seasons and the months.

How is it played?

You have to click on the Earth that is in the season that Pipo says.

If you pass the mouse over the positions of the Earth you will see the season and its name in the box.

"Level" button.



The default setting is for the Northern Hemisphere. To play with the southern hemisphere, access to configuration (see page 5).

There are **2 levels** in this game:

Level 1: You learn the equinoxes of spring and autumn and the solstices of winter and summer.

Level 2: As well as those mentioned, you will play with the four seasons.

Level 3: Se repasan los conceptos del nivel 1 sin ayuda.

Level 4: Se repasan los conceptos del nivel 2 sin ayuda.

THE CALENDAR OF THE SEASONS

SKILLS

Hearing and visual memory

Discrimination

Rough motor skills

Conceptual understanding

Time perception

Learning aims:

Differentiating the four seasons of the year in each Hemisphere.

Get to know the order of the seasons depending on the hemisphere.

How is it played?

You have to complete the calendar by sticking the cards in the center where they belong. Remember that the seasons in each Hemisphere are the opposite of one another.

"Loudspeaker" button: to repeat the announcement.

"Level" button.



Hits and misses.

There are **3 levels** in this game:

Level 1: Place the cards with the help of the gray background.

Level 2: Now you don't see the drawings, but there's an optional help (yellow question).

Level 3: There is no help at all.

THE CALENDAR OF THE MONTHS

SKILLS

General spatial perception
Rough motor skills
Image association
Visual memory
Visual distinction
Hand-eye coordination
Spatial orientation
Abstract reasoning
Concentration and attention
Temporal organization

Learning aims:

Learning the months of the year and the three-monthly seasons with help of images. Remember the order of the months and the seasons.

How is it played?

The game consists of putting each card in the correct place.

There are four seasons in each year and each one lasts three months. You have a calendar for each Hemisphere. The default setting shows the Northern Hemisphere. If you want to change this to the Southern Hemisphere, you have to access to configuration (page 5).

A picture that represents the month you have to place.

"Loudspeaker" button.

"Level" button.



The Hemisphere in which you are playing.

There are **2 levels** in this game:

Level 1: In order to help you, the drawings are shown in gray.

Level 2: Without help. The drawings are not shown in the background of the frame.

THE PUZZLE OF THE MONTHS

SKILLS

Rough motor skills
Image association
Visual memory
Visual distinction
Hand-eye coordination
Temporal organization
Concentration and attention

Learning aims:

Learning the months of the year and the three-monthly seasons. Remember the order of the months and the seasons.

How is it played?

Complete the puzzle by putting the pieces in the correct order. For this, you have to click on one of the pieces and put it in the empty place.

"Loudspeaker" button to repeat the announcement.



Hemisphere in which we are playing.

The default setting shows the Northern Hemisphere. If you want to change this to the Southern Hemisphere, you have to access to configuration (page 5).

TOPIC 5: THE SOLAR SYSTEM

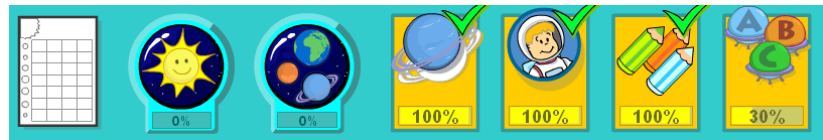
Main explanation: In this topic you will learn the most interesting concepts about our Solar System: the orbits of the planet, the shapes of asteroids...

Animation control panel: to make the planets turn through days, months or years (Play) or to stop them (Stop). If you want to see them move step-by-step, use the side buttons.



Listened robots counter.

Topic activities:



Extra Explanations:
the Sun and the planets
of the solar system

Games (from left to right): solar system
stickers, make pairs (page 11), colouring (see
page 11) and the test (see page 9).

Summary sheet

This page summarizes all the information about the Sun and the planets of the Solar System. It includes information such as the diameter of the equator, the mass, the average distance of each planet from the Sun, the rotation period... You can print it so that you can color it in and look up the information whenever you want.

THE SUN

Extra explanation: Pipo gives a review of the components and essential elements of our most important star, the Sun. The button for the game is in the lower part of the screen.

Game:
Click here to play
with the stickers of
the Sun and the
cards of the sun.



Listened robots
counter.

STICKERS OF THE PARTS OF THE SUN

SKILLS

Rough motor skills
Image association
Visual and verbal memory
Visual distinction
Hand-eye coordination
Abstract reasoning
Spatial perception

Learning aim:

Learning the different parts of the Sun and its location.

How is it played?

You have to complete the illustration by fitting the shapes or figures into the correct place.

"Loudspeaker" button:
to repeat the
announcement.

Important warning
button: Take care
with the Sun.



These are the zones
of the Sun that you
should know.

Hits and misses.

CARDS OF THE SUN

SKILLS

Distinction
Information organization
Concentration and
attention
long-term and short-term
memory

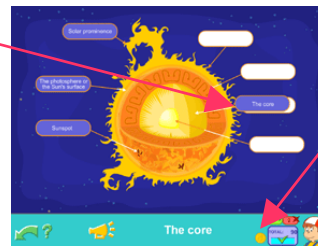
Learning aim:

Learning the different parts of the Sun and its location.

How is it played?

Consiste en colocar cada tarjeta donde corresponda. Las tarjetas irán apareciendo por la parte derecha de la pantalla. Para colocarla pulsa sobre el recuadro correspondiente. Si la respuesta es correcta quedará pegada, si no lo es, se contabilizará un error.

Stick the cards where they belong.



Hits, misses and solved percentage.

THE PLANETS OF THE SOLAR SYSTEM

Extra explanation: In this topic you will learn the planets of our Solar System and the differences and similarities between them. The robots will give you the most important information on each one. The buttons for the games are in the lower part of the screen.

Games:
the stickers of the planets
and the photos
of the planets.



Listened robots counter.

STICKERS OF THE PLANETS

SKILLS

Rough motor skills
Association
Visual and verbal memory
Visual distinction
Hand-eye coordination

Learning aims:

Knowing the planets in our Solar System, their size and its symbol .

How is it played?

The game consists in putting each planet in its place. While you solve the game, you will hear various bits of information on each planet

Put each planet
in its place.

"Loudspeaker" button:
to repeat the
announcement.



Here you can see the
distance of each
planet from the Sun.

It is like a game of stickers and, as it is so simple, even the youngest children will be able to solve it by trial and error.

THE PHOTOS OF THE PLANETS

SKILLS

Rough motor skills
Association
Visual memory
Visual distinction
Hand-eye coordination
Abstract reasoning
Spatial perception

Learning aims:

Differentiating and placing each planet in its orbit and correct position.
Distinguish between the inner and outer planets.

How is it played?

You have to place the photos of the planets on the correct orbit.

Pick up the photo by
clicking on it and click again
in the place you want to
stick it.

"Level" button and
"loudspeaker" button.



Hits and misses.

There are **4 levels** in this game:

Level 1: You have to place the photos of the Inner planets: Mercury, Venus, Mars, and the Earth.

Level 2: You have to place the photos of the Outer planets: Saturn, Jupiter, Uranus and Neptune.

Level 3: You have to place 5 random photos.

Level 4: You have to place the photos of all eight planets.

STICKERS OF THE SOLAR SYSTEM

SKILLS

Rough motor skills
Association
Visual and verbal memory
Visual distinction
Hand-eye coordination
Abstract reasoning
Espatial perception

Learning aims:

Locate and distinguish the planets from our solar system and its orbits.

How is it played?

The game consists of putting each planet in the correct place. As it is so simple (matching shapes) even the youngest children can solve it easily.

"Loudspeaker" button.

"Help" button.



Put each sticker in the correct place.

TOPIC 6: THE OORT CLOUD

Main explanation: Activate the robots in this screen and they will give you essential information about comets, asteroids and meteorites.

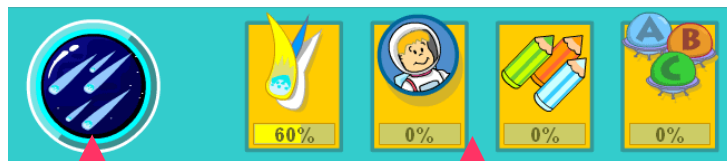
Animation control panel: to see the comet's journey (Play) or to stop it (Stop). If you want it to travel step-by-step, use the side buttons.



Listened robots counter.

"Diploma" button and "piggy bank" button.

Topic activities:



Extra explanation: showers of shooting stars.

Games (from left to right): stickers of a comet, make pairs (see page 11), colouring (see page 11) and the test (see page 9).

SHOWERS OF SHOOTING STARS

Extra explanation: This section tells you information about showers of shooting stars: why they happen, which are the most important and what shooting stars are

Game: place the cards.

"Help" button



Check out this animation to see how a shower of shooting stars looks from Earth.

CARDS OF SHOOTING STARS

HABILIDADES

Distinction
Organization of information
Concentration and attention
long-term and short-term memory

Learning aims:

Discriminating visually and verbally the different parts that make up a comet.
Learn what happens during meteor showers.

How is it played?

You have to put each card in the correct place. The cards appear on the right side of the screen. Click on the appropriate square to place the card. If you get it right, the card will stay in place, if not it will count as a mistake.

Place the cards where they belong..



Hits, misses and solved percentage.

THE PARTS OF A COMET

SKILLS

Rough motor skills
Association
Visual distinction
Hand-eye coordination
Graphic and general spatial perception

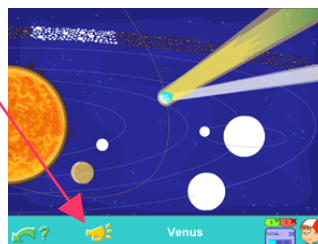
Learning aim:

Discriminating visually and verbally the different parts that make up a comet.

How is it played?

You have to put the different parts of a comet as well as other elements in the correct place in the illustration.

"Loudspeaker" button to repeat the announcement.



Stick each part of the comet in the appropriate place.

TOPIC 7: THE GALAXY

Main explanation: the Galaxy is an essential topic in astronomy. You should get to know the Milky Way, the types and parts of a galaxy, the nucleus of a galaxy, its movements, etc, to help you understand the many concepts you will come across in this topic.

Click here to see the Galaxy from various points of view (you can see it from above, the side or from the Earth).



Listened robots counter.

"Diploma" button and "piggy bank" button.

TOPIC ACTIVITIES:



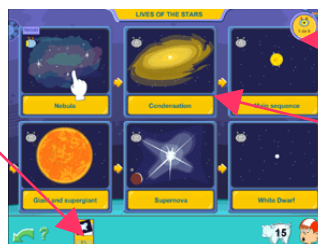
Extra explanation: the lives of the stars.

Games (from left to right): stickers of types of galaxies, make pairs (see page 11), colouring (see page 11) and the test (see page 9).

LIVES OF THE STARS

Extra explanation: here you will learn the different stages a star passes through from its birth to its death.

Game:
stickers of live
and death of a star.



Listened robots counter.

The arrows show the order in which you should read and the order of the process.

By clicking on the robots you will see the different phases in the birth and death of a star: nebula, condensation, main sequence, giant and supergiant, supernova and white dwarf.

LIFE AND DEATH OF A STAR

SKILLS

Rough motor skills
Association
Visual and verbal memory
Visual distinction
Hand-eye coordination
Abstract reasoning
Spatial perception

Learning aims:

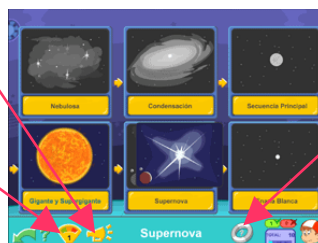
Understanding and distinguishing the different parts or phases in the life and death of a star.

How is it played?

The game is based on putting the images, representative of each phase, in the correct place.

"Loudspeaker" button
to repeat the
announcement.

"Level" button.



"Life buoy" button.

There are **3 levels** in this game:

Level 1: To help you the drawings are shown in gray.

Level 2: You don't have the help of the drawings; you have to place the images with the help of the text. But you can still use the "life buoy" button if you need help (it will show you the images in gray in each frame).

Level 3: There is no help of any kind. You have to place all the images that represent the phases of the birth and death of a star.

TYPES OF GALAXIES

SKILLS

Rough motor skills
Association
Visual and verbal memory
Visual distinction
Hand-eye coordination
Abstract reasoning
Spatial perception

Learning aims:

Discriminating the different parts of a galaxy and the types that exist.

How is it played?

You have to fit the pieces to complete the picture: a classic game of fitting shapes.

"Loudspeaker"
button.

"Help" button.



Place each galaxy
in the correct place.

TOPIC 8: THE UNIVERSE

Main explanation: In this screen the robots will show you everything you need to know about the Universe at a general level.

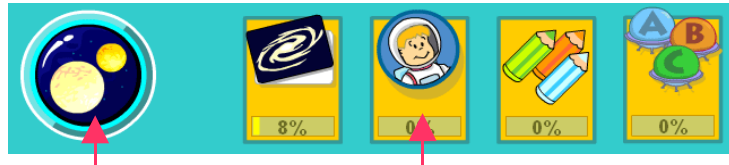
Extra explanations and games of the topic.



Listened robots counter.

"Diploma" button and "piggy bank" button.

TOPIC ACTIVITIES:



Extra explanation:
types of stars.

Games (from left to right): *stickers of the size of the universe, make pairs (see page 11), colouring (see page 11) and the test (see page 9).*

TYPES OF STARS

Extra explanation: In this screen you can learn about the different types of stars, their colors, brightness, magnitude...

Game:
stickers of types of stars.



STICKERS OF TYPES OF STARS

SKILLS

Rough motor skills
Image association
Visual and verbal memory
Visual distinction
Hand-eye coordination
Abstract reasoning
Graphic spatial perception

Learning aim:

Visually and verbally distinguishing diverse types of stars.

How is it played?

You have to fit the pieces to complete the illustration: a classic game of fitting figures or shapes.

*"Loudspeaker" button:
to repeat the
announcement.
"Help" button.*



*Place each star in the
appropriate place.*

Hits and misses.

This is the best game for the youngest players, given the simplicity of the game. It's just a classic game of fitting shapes.

THE SIZE OF THE UNIVERSE

Learning aim:

Learning where the Earth is within the Universe and the size of the Universe.

SKILLS

Rough motor skills
Image association
Visual memory
Verbal memory
Visual distinction
Hand-eye coordination
Abstract reasoning
Spatial perception

How is it played?

The game is based on putting each image in its proper place., from those closest to the Earth to those furthest, in the order that they should be read.

"Loudspeaker" button.

"Level" button.

"Life buoy" button.



There are **3 levels** in this game:

Level 1: To help you the drawings are shown in gray.

Level 2: You don't have the help of the drawings; but you still have the help of the text. However, you can use the "life buoy" button to show you the images in gray.

Level 3: There is no help of any kind. You have to place all the images.

THE ASTRONOMER'S NOTEBOOK

From the Astronomer's Notebook you can access the topics: Notes on the history of astronomy, Spaceships and Hints and tips for young astronomers. These have been grouped together in the notebook because they are more theoretical than practical.

Spaceships.



Hits and tips for young astronomers.

Most important people and events in astronomy.

TOPIC 9: HINTS AND TIPS

Main explanation: Here you have very practical advice to bear in mind when you are observing the night sky.



Games (from left to right): stickers of hints and tips, find hints and tips, make pairs (see page 11) and the test (see page 9).

STICKERS OF HINTS AND TIPS

Learning aim:

Learning the advice on the previous screen.

How is it played?

You have to select a word from the list and place it on the image to which it corresponds. The game is over once you have matched all the illustrations.

SKILLS

- Rough motor skills
- Image association
- Visual and verbal memory
- Hand-eye coordination
- Abstract reasoning
- Spatial perception

*This list shows
all the objects and
concepts that you have
to play with.*



FIND HINTS AND TIPS

SKILLS

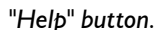
- Rough motor skills
- Image association
- Visual and verbal memory
- Visual distinction
- Hand-eye coordination
- Abstract reasoning

Learning aims:

Differentiate different concepts and reinforce learning undertaken.
Strengthen attention span, memory and concentration.
Learning the advice on observing the sky.

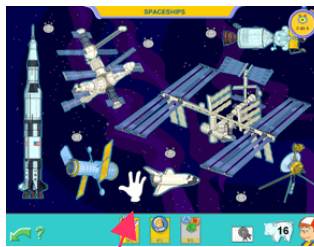
How is it played?

Listen carefully to what Pipo is asking for and click on the illustration used to represent that piece of advice..



TOPIC 10: SPACESHIPS

Main explanation: In this topic you will meet the most important spaceships from the space age, learn to recognize them and understand how they work. It focuses on the Saturn V rocket, the MIR space station, the Hubble space telescope, the Voyager space probe and the Apollo XI lunar module



Games (from left to right): build spaceships, make pairs (see page 11) and the astronomer's test (see page 9).

BUILD SPACESHIPS

SKILLS

- Visual and verbal memory
- Visual distinction
- Fine motor skills
- Hand-eye coordination
- Spatial orientation
- Abstract reasoning
- Concentration and attention

Learning aim:

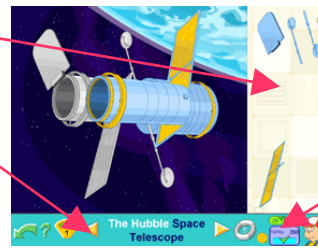
Get to know the structure of spaceships.

How is it played?

You have to build five spaceships. The pieces you have to place are on the left side of the screen, in no particular order. Select the one you want by clicking on it, and then click again where you want to place it.

These are the pieces of the spaceship that you have to place.

Arrows: to change the spaceship you want to build.



Hits and misses.

There are **3 levels** in this game:

Level 1: You are shown the drawing of the spaceship in gray, to help you.

Level 2: You no longer see the drawing in gray. However, you can use the “life bouy” button to show you the images in gray.

Level 3: There is no help of any kind.

TOPIC 11: NOTES ON THE HISTORY

Main explanation: This is a general review of the most important people and events in astronomy: early myths, Aristotle, Ptolemy, Copernicus, Kepler, Galileo, Newton, Herschel, Einstein, Galle, Tombaugh, Gagarin, Armstrong, Sputnik, Laika, MIR and Pathfinder.

Games:
stickers,
make pairs (see page 11)
and the astronomer's test
(see page 9).



Click on the robots or the squares to find out a mountain of things about the history of astronomy.

HISTORICAL PEOPLE AND EVENTS

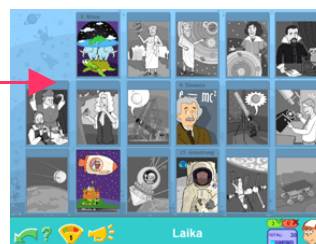
Learning aim:

Identifying different people and events in the history of astronomy.

How is it played?

You have to stick each image in the appropriate place.

Stick each image in the place where it belongs.



There are **2 levels** in this game:

Level 1: To help you, the drawings are shown in gray.

Level 2: You don't have the help of the drawings; you must place the stickers using only the text.

SCORES

Press this button to access the scoring screen.



The program follows up the progress and scores of each player. This keeps the children constantly motivated to improve and continue playing.

Player's name
and date.

Topics

Detailed scores
for each activity



Activated robots.

When you pass the
mouse over the icons you
will see a short
description of the game

COINS AND PIGGY BANK



You will receive a coin for
each level you solve.

SPACESHIP BUTTON



When you have bought a
part, click on this button to
place it.

DIPLOMA

When you insert the last
piece of the spaceship you
will receive a diploma.



You can print your diploma
in color or in black and
white..

So that the parents and/or tutors can assess the progress, they can look at the score screen where the results for each game are shown. This page can be printed, with the name of the player and the date.

Remember that you can deactivate access to the printer in the configuration screen so that young children don't press the button indiscriminately and waste paper.

THE SHOP

On this screen all the pieces for the construction of the Spaceship can be purchased.

The coins represent the advance and progress of the players in the game, but in a more attractive form, amusing the players confronted with a flat representation of numbers and/or percentage.

Arrows: to select
the piece.

"Spaceship" button:
to enter the spaceship
garage.



Drag the coins
to this opening.

Click on this button
to buy.

It is possible to access to the Shop clicking on the Piggy bank.

For this, the player will have to drag the coins from the Piggy bank to the spending machine and introduce them through the slot. After that you will have to select the piece that you wish to purchase using the yellow arrows and clicking the "buy" button.

THE SPACESHIP GARAGE - LEARNING OBJECTIVE

The pieces purchased in the Shop are kept in the space garage. In order to place each piece you must drag it from the bookcase to its corresponding place in the spaceship.

The Airplane is gray.
When the pieces
are put into place these
become coloured.

Click on this button to
return to the shop.



Drag the pieces from
the bookcase to the
spaceship.

You can assemble and
dismount the pieces as
many times as you wish.

THE GALACTIC ASTRONOMER DIPLOMA

As a reward for so much work and as a way of saying thank you for having helped in the construction of the spaceship, Pipo and the scientist will give you a very special present, the Diploma.

The diploma has the name of the player and the date on which he or she finished the product. You can print it in black and white so that the child can color it.

CREDITS

Copyright © 1996-09.
Cibal Multimedia.

*Total and/or parcial
reproduction, adaptation,
or translation without prior
permission in writing is
forbidden, except where
permitted by the laws of
author rights..*

Legal deposit:
PM 1338-2000.
ISBN 978 84 95370-01-3.

All rights reserved.

www.pipoclub.com

Produced by: CIBAL Multimedia S.L.

Original idea and direction: Fernando Darder

Original graphical creation: Eva Barceló

Graphical design and illustration: Eva Barceló, Javier Liébana, Miquel Albertí

Authoring and Programming: Fernando Darder, Alicia González, Marc Puig, Juanga Covas, Miguel Juan

Pipo's voice (Spanish and Catalan): Aina Cortés

Pipo's voice (English): Frances McMahon, Mary Rodríguez

Melodies: Carlos Cristos, Pedro Darder

Psychopedagogical consultant: Fernando Darder

Learning guide design: Eva Barceló

Learning guide contents: M. Angoso, Victoria Marín

English translation of the game: Frances McMahon

English translation of the guide: Lesley Ann Daniels

Commercial department: Pilar Gómez

General direction: Domingo Sanz