TRAVEL IN TIME WITH MATHEMATICS
5TH Level PIPO Y LOS VIKINGOS

CONTENTS

www.pipoclub.com

CD ROM
Access all the information in the collection in this format: product details, technical service, learning guides, shop, etc.
ONLINE
Now you can play with Pipo from any computer with this online access.
DIGITAL
You can buy any Pipo product and download it directly to your computer. Play without delay and without needing a CD.
SCHOOLS
Pipo offers group licenses for schools. Learn and play with your classmates in the Online section.

GENERAL INTRODUCTION

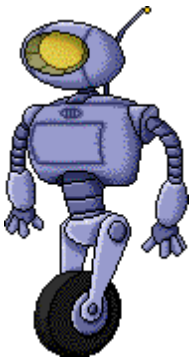
Pipo is a collection of educational games on CD-ROM that immediately catch children's interest via the creative presentation and development of the themes engaging them on each CD. The games and activities are presented in developmentally appropriate programming best suited to the individual student's learning style and capability. Experts in the field of Child Psychology with the assistance of professional educators have worked to provide activities which will support the development of an independent child, playing by himself; using and stimulating their intuition, reasoning, and creative ability.

Although children perceive the games as simple as he/she enjoy the activities

they are engaged in activities that are part of a detailed plan of academic content driven objectives. Programmed activities encompass a wide range of ages from 15 months, 3 years, 8, their own pace according to their ages and individual capacity to learn. In addition some programs provide the ability to increase the level of difficulty for each individual. These characteristics and program options have also been found to be of great benefit to children with learning disabilities or in Special Education. The educational content of the Pipo programs is aligned to key basic understandings outlined in national and state mandated curriculum for elementary classrooms.

PIPO AND THE VIKINGOS

Pipo is accompanied by a new friend, Neuron, a robot who will accompany him in his journey through time.



Pipo y los Vikingos is part of a new collection "Travelling Through Time with Mathematics". The collection is framed within current educational mathematics objectives focusing on primary level content. Mathematics content is presented in different eras in history in an informative and interesting manner. The mathematics covered in this CD address in 5th or 6th grade content.
Other titles in this collection address content from first to sixth grade and addresses elementary mathematics from 6 to 12 years of age.

CURSO	TÍTULO	EDAD
1°	Pipo en el Egipto Faraónico	6-7 años
2°	Pipo en la Grecia Clásica	7-8 años
3°	Pipo en la China Imperial	8-9 años
4°	Pipo en el Imperio Maya	9-10 años
5°	Pipo y los Vikingos	10-11 años
6°	Pipo en la Edad Media	11-12 años

This collection is dedicated exclusively to mathematics content. The games and activities complement each other and it is possible that some games in consecutive CDs will present similar content. The main difference in these situations will be the amount of time allotted for students to arrive at a solution. More time will be allocated for the lower level activity (see page 3).
Game length will vary in accordance to the child's individual ability and pacing. However, each activity does have a basic time limit to win the maximum number of points to be scored by each participant upon reaching a correct solution.
Each game is arranged into six sections with a total of 25 activities each programmed with clearly defined content objectives. In addition 5 ingenuity games are also programmed to foster the development of creativity and logical thinking.
Logical reasoning and mathematics content is all too often presented in complex formats that children find uninviting and overwhelming. This software was purposefully created in a form children could clearly understand and enjoy using while learning important mathematics content. Children are not just playing a game, they are enjoying an activity that is strengthening key mathematical content knowledge. With this in mind the intention is to activate and maximize the young child's incredible capacity for learning…a capacity far superior to that of an adults'.

PARENTS AND EDUCATORS

Games encompass mathematics content taught in classrooms over extended periods of time. For this reason constant moderate use of this product is recommended. In other words, it is much better that children play for short periods of time every day or several days a week, simultaneously playing different games.

If the children get too intense in pursuit of their math explorer diploma, they could "perish" in their intent by becoming disheartened if the goal of the diploma is not quickly reached. Instead they could be encouraged to use the progress sheet to mark partial objectives. We can say, "Let see if you can complete level 3 of the fractions. When you have finished you can print the outcome." We need to remember that this is elementary school academic content which will take time to master if children are to truly learn from the activities. We can motivate the child to pursue the winning of "precious stones" which in essence means that the levels of difficulty will be increasing as content knowledge is being acquired.

THEORY

In the games you will find this icon.Clicking upon it will link you to the page containing content support.

This product is based on the following "small theory." It is important to understand that the games and activities are most useful mainly as a supplement supporting certain areas of the core grade level mathematics curriculum. It is not our intention to supplant the use of textbooks and other curricular resources. One manner of addressing concepts not easily addressed through the games is the test format which is also included as part of the program sequence. The test is divided into four sections and permits a review of all the theoretical content that is presented in all the games and activities.

It is important that children explore, investigate, and discover the options found in the games, making possible the development of natural interest and motivation, thus maximizing learning opportunities for each child.

Time control and scoring

Time control and scoring on the games: mastery of each one of the levels of a game, is achieved by obtaining 10,000 points. The points accumulate according to the number of completed exercises and how quickly they are solved. Children who play quickly and accurately can increase their level of difficulty faster, while those who need to do so will solve more exercises. The scoring system should not be utilized to compare the children one to another. The program has been designed in such a way that each child gets 10,000 points when he/she has solved a required number of exercises within a determined speed.

It is necessary to be aware that the points such as they are, are not important. The games' goal is not that the students reach maximum scores. The goal is to reach 10000 points at a comfortable rate,that maximizes the internalization of each sections' content knowledge and/or skills.

The speed of execution simply gives us an idea about how the game, and the program supports ,or not, each student engaged in the activity. Student achievement is most important for if he/she persists with the game, success will eventually occur.

All of the activities have several levels of difficulty that allow students to adapt to the game and while they acquire and internalize the content and/or skills. The levels not yet reached are shown in gray and cannot be downloaded until students are ready for that level.

It is very important that the individual child works through the activities without much help. Do not rush in to offer aid even if the child is about to make a mistake. Allow them to err and learn from their mistakes. Built into each activity is the opportunity to click on the **F1 key** for help. A brief summary of the game as well as "General Help" which includes information about:

1.The trip through time with Mathematics
2.Program function
3.Games
4.Generalities
5.Pedagogy for Parents and Educators

HELP

Click on the F1 key for contextual help.

To view and print the help page click on the question mark Icon.

TO BEGIN

To begin the game,two options are given: To play without changing the resolution or to play enlarging the screen. We recommend the second because it provides a better visualization of the images and facilitates it's use to the participants

Play with normal screen.

Play with wide screen

YOUR MISSION

Did you know the vikings had their own alphabet? They called it futhark. Each ***letter*** *was a* ***rune****. This is what Hela has stolen.*

To overthrow ***Hela's plans*** *players must find all the* ***runes*** *she has hidden in the labyrinth.*

To locate all the runes you must master a series of games.

Look for them in the labyrinth! (a total of24).

Pipo starts the time machine and heads towards viking village of Kaupan g.

Our mission is to recover the magic runes stolen by Hela, queen of the dead, to avoid the end of the world.

Upon landing players can click on the play button to begin the games, or go to the options screen where brief summaries of all activities can be found..

If your name is already on the list click on it and begin playing.

Options F5

Exit

Type name in twice if you are a first time player.

Credits

Play

F1 Accesses general help, a short summary of the contents, function ing of the program, relation of the different activities in the game and some advice for parents and educators.

F5 Options, Visualization and brief explanation of the games.

F8 Accesses the configuration screen.

F9 Accesses the progress sheet or punctuation (of each child in each game).

LEVELS

Mastered levels are marked with a green checkmark. Other levels appear in grey.

Village of Kaupang

Robot's operations manual.

Exit

Your location on the world globe.

Theory, Test and Problems

Mental math

Each activity has a determined number of levels that need to be mastered to complete the mission. The game comes configured by default, in a progressive method, one level cannot be passed to another level before the previous one is mastered. In any case, there does exist the possibility of playing at any level, if the teacher or parent considers it to be appropriate. The adult can give this control by accessing the configuration screen and selecting that option (F8).

The Precious Stones

F9

We have to make a great effort because the cells in the labyrinth can only be opened with precious stones! We will get a stone for each level mastered.

The final goal of the levels system is that children obtain a cumulative understanding and advance their learning by delving deeply into skills and content. The majority of the games are configured in this way. Although there are other games in which increasing the level provides access to innovative activities in the same content, they are not more difficult, but the dynamic of the game changes at the conceptual level. After completing each one of the levels, ,through the points system (by reaching 10000 pts). The subject earns a precious stone that will be used to save the magic runes. This will guide us directly to the final reward (consult page 18).

Clicking on the F5 key, we can get a quick look at the entire program.

OPTIONS

F5

Use the arrows to see all the games and activities.

F9 Progress

Exit

Brief explanation of each screen.

CONFIGURATION

F8

The F8 key allows certain changes to the game.

The program allows possible changes to:

LEVELS:

The game comes configured as a progressive method, in a way that if the measure of a level is enhanced, it passes to the next one (always at the user's convenience, depending if Pipo asks for such a change). The game can also be configured to access any desired level (without a progressive method). This change only affects the selected player.

DECIMAL POINT:

The ability to activate the expression utilized in the specific educational system: Then the period or comma is configured automatically for all the players.

DIVISION MODEL:

The option to operate using the division model used in the specific educational system (Anglo-Saxon or Spaniard). This change is then configured automatically for all the players.

MONETARY UNIT:

This refers to the ability to select the monetary unit employed in daily life by the players

(Euros or dollars). This change is then configured automatically for all the players.

Levels: Progressive play or allows play at any level.

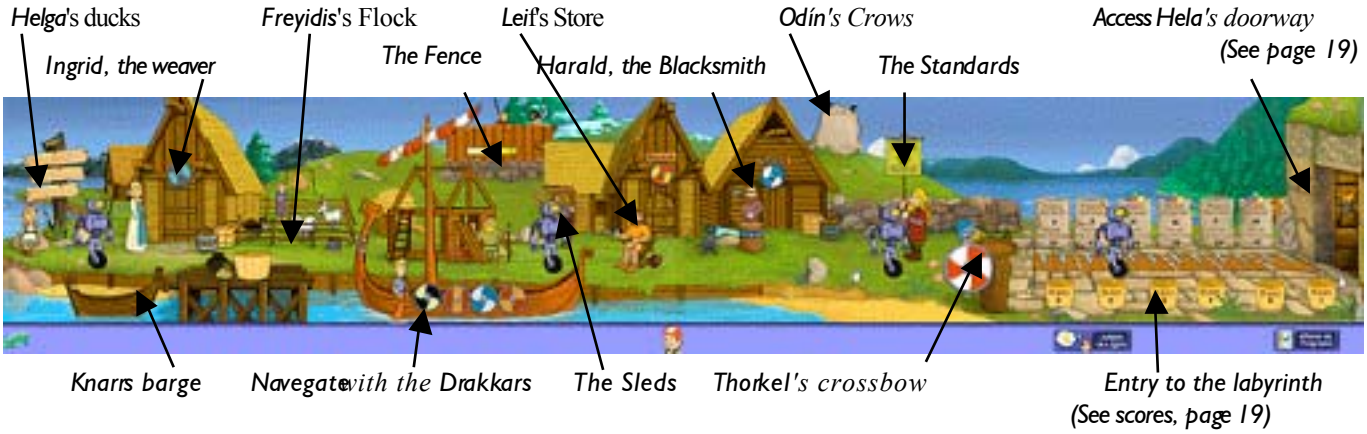
Decimal symbol: period or comma.

Money: Euros or Dollars

Type of division: Spanish or anglosaxon

THE VILLAGE OF KAUPANG

Talk to the inhabitants to learn more about the Viking world. They can also tell you how to enter the different game portals. To move through the village use the yellow arrows found at the sides of the screen.



These activities support the learning of content related with organizing information, measurement, geometric figures and the number system.

Use of the "Help" button or F1 key is recommended, for clarification of gamew objectives. You also can use the "Theory" button to help you with content.

Academic Objective:

HELGA'S DUCKS

SKILLS

Handeye Coordination

Logical mathematical reasoning

Comprehension and interpretation

Deductive Thinking
Recognition

Discrimination

Make equivalencies, estimations and exchanges within metric system

How to play?

Place the units measuring length on the post in order with the greatest on top and the least on the bottom of the post.

5 Levels of difficulty:

Level 1: Units used to measure length.
Level 2: Fractions.
Level 3: Decimals.
Level 4: Complex and simple.
Level 5: Comparing lengths

FREYDIS'S FLOCK

Academic Objective:
Foster crítical analysis of information to calculate probability of an event.

How to play?
Two ways to play:

1.Identify the probability: Note the animals in the corral and select the haywagon with the probability reflected by the animals.

SKILLS

Visual memory

Discrimination

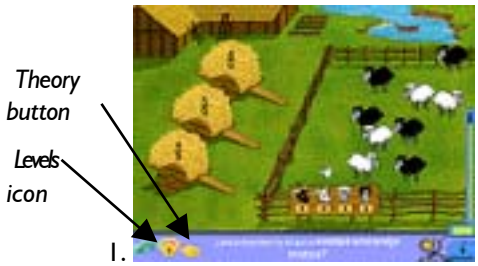
Mathematical Reasoning

Comprehension

Categorization

Estimation
Composition and decomposition

2. Create the probability: Organize the animals in the large corral in order to reflect the probability indicated. Click on the "OK" button when you are finished.



To know how many animals and the type in the corral view the tally poster. OK button

5 Levels of difficulty:
Level 1: Identify the probability I (sheep).
Level 2: Create the probability I (sheep).
Level 3: Identify the probability II (sheep and goats).
Level 4: Create the probability II (animals).
Level 5: Create the probability III (animals)

INGRID THE WEAVER

SKILLS

Visual memory

Categorization

Abstraction

Concentration

Short and long term memory

Discrimination

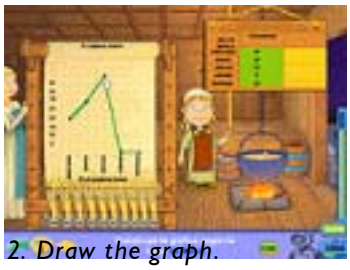
Reproduction

Interpretation

Academic Objectives:
Foster the critical analysis of information.
Determine medium and mode

How to play?
There are **3 ways** to play:
1. **Interpreting** the graph, answering specific questions.
2. **Building** a graph, using data from a table. To build:
- Bar graph: drag the bar to the indicated level One click to grab the bar and one click to drop it.
- Line graph: drag the end points to indicated coordinates.
- Circle graphs: select the color from Cuca's table and click on the zone you wish to color.

3. **Complete** Cuca's table of frequencies, according to the graphic representation. When finished click "OK". To respond quickly click on TAB (Tabulate) to move from one data element to the next. Press "ENTER" the same as OK.



2. Draw the graph.

3. Complete frequency table.

1. Answer question

4 Levels of difficulty:

Level 1: Bar graph
Level 2: Line Graph
Level 3: Circle graph
Level 4: Double graph

KNARR'S BARGE

SKILLS

Logical mathematical reasoning

Agilidty and mental math

Composition and decomposition

Abstraction

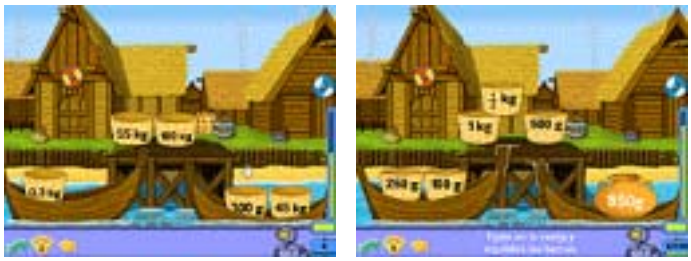
Estimation

Academic Objective:
Foster and stimulate logical mathematical capacity.
Use conventional measurement instrument (balance scale).

How to play?
The game consists of the placement of baskets on the barges according to the indicated measurement of mass (kg, hg, dag, g, dg, cg, mg) and capacity (kl, hl, dal, l, dl, cl, ml).

There are two ways to play:

1. Balance the barges using all the given weights.
2. Balance the barges according to the weight of the large pot.



5 Levels of difficulty:

Level 1: Equalize the barges balance, using the baskets (weight).
Level 2: Equalize the barges balance, using all the baskets (weight).
Level 3:Equalize the barges balance, taking into account the weight/volume of pot I.
Level 4: Equalize the barges balance, taking into account the weight/volume of pot II.
Level 5: Equalize the barges balance, taking into account the weight/volume of pot III.

EDGAR AND ERIK'S SLEDS

SKILLS

Number recognition and numbers in a series

Mental math

Sequencing

Discrimination

Concentration

Comprehension

Generalization

Academic Objective:
Stimulate the reading and interpretation of fractions and decimals.

How to play?
Take the sleds to the cave with the correct answer.

6 Levels of difficulty:

Level 1: Fractions less than one.
Level 2: Fractions more than one.
Level 3: Decimals.
Level 4: Comparing fractions.
Level 5: Equivalent Fractions.
Level 6: Operations with fractions (adding and subtracting).

OLAF'S HOUSE

Academic Objective
Foster logical reasoning.
Learn to identify numerical sequences.

SKILLS

Abstract thinking

Logical reasoning

Deduction

Mental math

Number relationships using these symbols (>, <, =).

How to play?

Finish Olaf's house with the wooden blocks. To do so you will have to use comparison symbols: greater than (>), less than(<), same as (=); that you will select from the cut logs on the lower right hand side of the screen. You will place, natural numbers, decimals, fractions and equations.

Place the logs on the house where they belong.

Theory button

Levels icon

Take from the trunks the symbols needed.

5 Levels of difficulty:

Level 1: Natural numbers.
Level 2: Decimals.
Level 3: Fractions.
Level 4: Equations.
Level 5: From greatest to least, from least to greatest.

NAVIGATE THE DRAKKAR

SKILLS

Agility and mental math

Logical mathematical reasoning

Discrimination

Estimation

Abstract and/or deductive thinking

Academic Objective:
Foster the reading and the graphic discrimination of roman numerals.

How to play?
Prevent the drakkar from crashing, guide it to the roman numeral matching the number written on the drakkar's sail.

Only one of the three options is correct

Go to the theory button if you need help.

You can use the arrows on the screen or the keyboard to manuever the drakkar.

*The "**Hacia Arriba**" arrow gives you more time if you need to think.*

5 Levels of difficulty:
Level 1: Numbers 1 to 500. Up to 4 roman numerals.
Level 2: Numbers 500 to 3000. Up to 6 roman numerals.
Level 3: Numbers 3000 to 10000. Up to 7 roman numerals.
Level 4: Numbers 10000 to 15000. Up to 8 roman numerals.
Level 5: Roman numerals (1 to 15000).

KALIPANG FENCE

SKILLS

Agility and mental math

Logical mathematical reasoning

Abstract Thinking

Estimation

Academic Objective:
Recognition and confident manipulation of fractions basic operations.

How to play?
Find the pieces needed to repair the hole in the fence.

The screen is divided into 3 parts:

The upper part, in the tower, the pieces you can use are stored here. Select a piece to use in the fraction machine (fence). Pieces you do not use are stored here.

The fence is the fraction machine. Cut, paste, mix and multiply the piece until you get the desired pieces.

The lower part, the hole colored black, is where the correct pieces are placed.

LEIF'S STORE

SKILLS

Handeye coordination

Number recognition

Numbers in a series

Sequencing

Categorization

Composition and decomposition

Academic Objective:
Recognize numbers, according to the decimal system, from the thousandths to the hundred million 9 digit numbers).

How to play?
Take the numbers hanging on the wall and place as directed.

5 Levels of difficulty:

Level 1: Find the natural number expressed in the sentence and place according to deciaml system and place value.
Level 2: Build a natural number as indicated in the sentence.
Level 3:Build the decimal number.
Level 4: Build the decimal number as indicated in the sentence.
Level 5: Round to the uit indicated.

HARALD THE BLACKSMITH

SKILLS

Visual memory

Discrimination of forms

Recognition

Concentration and attention

Comprehension

Categorization

Abstraction

Short and long term memory

Acedemic Objective:
Foster comprehension and recognition of Geometric figures.

How to play?
Tell Neuron to shatter the indicated geometric figures.

4 Levels of difficulty:

Level 1: Polyhedron: prisims and pyramids.
Level 2: Regular Polyhedron .

Level 3: Round shapes;
Level 4: Geometric shape and their development.

ODIN'S CROWS

SKILLS

Comprehension attention and concentration

Composition and decomposition

Agility and mental math

Abstraction

Logical mathematical reasoning

Estimation

Academic Objectives:
Calculate and express surface measurement in multiples and sub-multiples.
Develop personal strategies for measuring surfaces.

How to play?
Find the surface measurement of quadrilaterals, and regular and irregular polygons

In most cases with quadrilaterals the calculator is not necessary for determining the surface measure. Most times you can just count the units.

However,with irregular polygons, use of the calculator is recommended You'll have to section the figure into smaller polygons to make it easier to find out the area. Each time you use the calculator it is noted in the **NOTES BLOCK.** This acts as a portfolio where a history of your is kept.

*The **Notes Block** contains a history of all operations used.*

Use the calculator for pertinent operations.

Note the size of the squares and the unit of measure.

Click OK when correct answer is found.

5 Levels of difficulty:

Level 1: Quadrilateral Figures I.
Level 2: Quadrilateral Figures II.
Level 3: Regular Polygons .
Level 4: Irregular Polygons.
Level 5: Change of surface units.

SNORRE AND THE STANDARD BEARERS

SKILLS

Visual memory

Discrimination and recognition of shapes

Categorization

Abstraction

Concentration

Academic Objectives:
Foster the recognition of polygons and their attributes, as well as with other geometric shapes.

How to play?
Shoot down the standard portraying the form indicated by the sentence.

Shoot down the standard displaying the correct figure.

Theory icon

Click on the Time control to enter the labyrinth. You can also use the F9 key.

6 Levels of difficulty:

Level 1: Polygons and attributes.
Level 2: Classification of triangles.
Level 3: Classification of quadrilaterals
Level 4:Classification of polygons.
Level 5: Circumference and circles
Level 6: Perimeter of a polygon.

THORKEL'S CROSSBOW

SKILLS

Abstract and deductive thinking

Handeye coordination

Discrimination

Sequencing

Categorization

Comprehension

Academic Objective:
Recognition and classification of angles by distinct attributes.

How to play?
Two ways to play, alternating at each level;

1. Shoot the crossbow at the tree trunk indicated in the sentence.
2. Noting where the crossbow has landed select the sheltered corresponding answer.

Theory button.

Shoot the arrow at the indicated tree trunk. Pass over with curser if help is needed.

Noting where the crossbow has landed select the sheltered corresponding answer.

4 Levels of difficulty:

Level 1:Base angles.
Level 2: Acute, right, obtuse, straight, complete.
Level 3: 45° Angles .
Level 4: 15° Angles .

ROBOT'S OPERATIONS MANUAL

SKILLS

Concentration and attention

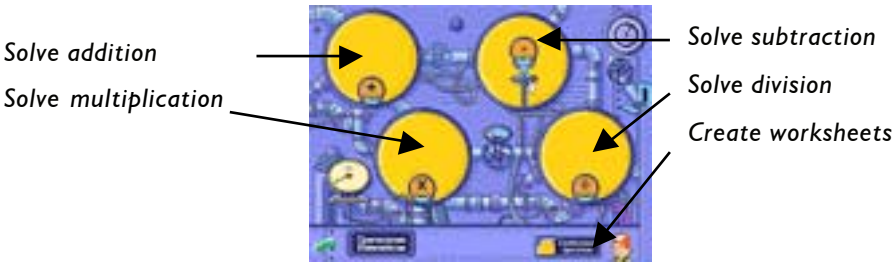
Agility and mental math

Logical deductive reasoning

Reasoning

Abstraction

This section provides practice with four basic mathematical operations (addition, subtraction multiplication and division). You are also provided the ability to personalize paper and pencil exercises printible for each student..



SOLVE ADDITION

Academic Objective:
Practice addition.

How to play?
The robot is out of energy you must solve the addition problems to recharge.

***Click* on Nº**
At times it is faster to use the numbers to the right of the keyboard. Activate with BLOQ NUM keys.

Levels icon

Exit

Time control. Click here or on F9 if you want to check progress.

6 Levels of difficulty:

Level 1: Addition with natural numbers.
Level 2: Addition with several addends.
Level 3: Addition con one decimal.
Level 4: Place and solve addition.
Level 5: Place and solve. Decimals I.
Level 6: Place and solve. Decimals II.

On the last three levels addends need to be placed into the problem (natural numbers and decimals). If you make a mistake or need to change an answer click on the numbers to change them.

SOLVE SUBTRACTION

***Click* on Nº**
At times it is faster to use the numbers to the right of the keyboard. Activate with BLOQ NUM keys.

Academic Objective:
Practice subtraction.

How to play?: The robot is out of energy you must solve the subtraction problems to recharge. him.

Place the numbers to be subtracted onto the grid.

Levels icon

Time control. Click here or on F9 if you want to check progress.

5 Levels of difficulty:

Level 1: Natural number subtraction.
Level 2: Decimal subtraction.
Level 3: Place and solve subtraction.
Level 4: Place and solve subtraction using decimals I.
Level 5: Place and solve subtraction using decimals II.
On the last three levels player places minuend onto the grid (natural numbers and decimals). If the placement is to be changed click on the number.

SOLVE MULTIPLICATION

CONSULT the TABLES
If in doubt go to Theory icon to see multiplication tables.

Academic Objective:
Practice multiplication.

How to play?
The robot is out of energy you must solve the multiplication problems to recharge him.

Go to theory if help is needed with multiplication tables

Levels icon

Time control

***Click* on Nº**
At times it is faster to use the numbers to the right of the keyboard. Activate with BLOQ NUM keys.

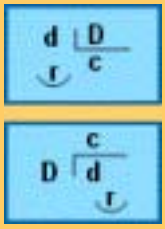
5 Levels of difficulty:

Level 1: Multiplication 4 digits by 2 digits.
Level 2: Multiplication 4 digits by 3 digits.
Level 3: Multiplication: decimals
Level 5: Multiplication: decimals II.
At the last **two levels player must place decimal in the answer.**

SOLVE DIVISION

F 8
Pipo allows choice of English division or

Spanish Division.



English Division

Academic Objective:
Practice division.

How to play?The robot is out of energy you must solve the division problems to recharge. If attempted numbers are incorrect they will appear in red.

.

Go to Theory if help is needed.

Levels

Scoring points.

Once 10,000 points are achieved precious stones are awarded and players move tp next level.

6 Levels of difficulty:

Level 1: Division, 4 digit by 2.
Level 2: Division, 5 digit by 3.
Level 3: Division, 6 digit by3.
Level 4: Division, 0 in the quotient.
Level 5: Decimals in the quotient I.
Level 6: Decimals in the quotient II.

PRINT YOUR OWN WORKSHEETS

SKILLS

Concentration and attention

Agilidty and mental math

Logical deductive process

Reasoning

Composiction and decomposition

Coordination

Academic Objectives
Foster development of personal strategies.
Practice basic skills and operations (add, subtract, multiplication and division)

How to play?
If traditional paper and pencil practice is deemed necessary personalized worksheets can be printed.

Once conceptual understanding is in place the computer is to be used appropriately to practice basic operations skills.

Estimation

Long and short term memory

Options: rows, columns, and how problems on a page.

Select the operation to be practiced here.

Select appropriate level.

Finally click on yellow button to print worksheet.

MENTAL MATH

Main objective is using the composition and decomposition of number to carryout rapid mental calculations within four different games with a focus on the four basic operations.

Trap the tree

Give the bear

Pick up the barrels with the grapple

Break the ice

The seals

TRAP THE LOG

HINT

***Some of the levels have a Hints button** with advise as to how to solve the equation more quickly.*

Academic Objective:
Practice adding and mental calculations.

How to Play?
Catch the log as quickly as possible. Player must also put out the torches or risk losing points.

Look at the equation and select the correct answer.

Levels icon

Click on the hint button for an easier way to solve the problem.

7 Levels of difficulty:

Level 1: Adding 0.
Level 2: Adding 99 to a number.
Level 3: Adding 298.
Level 4: Adding 1995.
Level 5: Adding numbers with several digits
Level 6: Estimation I.
Level 7: Estimation II.

DUNK THE POLAR BEAR

Academic Objective:
Practice subtraction and mental calculations..

How to Play**?**
Dunk the polar bear carrying the correct answer as quickly as possible. At the same time prevent the bird from reaching the other side or you loose points.

HINT

Some of the levels have a Hints button *with advise as to how to solve the equation more quickly.*

Keep the bird from reaching the other side or loose points

Theory icon

Levels con

Select the bear carrying correct response.

5 Levels of difficulty:

Level 1: Natural number subtraction.
Level 2: Decimal subtraction.
Level 3: Place and solve the subtraction.
Level 4: Place and solve the decimal subtraction. I.
Level 5: Place and solve the decimal subtraction II.

THE SEALS

HINT

Some of the levels have a Hints button *with advise as to how to solve the equation more quickly.*

Academic Objective:
Practice **multiplication** and mental calculation.

How to play?
Click on the seal carrying the correct answer as quickly as possible. Keep the sea lion from reaching the other side or he take time from you.

Select the seal with correct answer

Theory icon

Time control . Here you can enter the labyrinth.

6 Levels of difficulty:

Level 1: Multiply by 11.
Level 2: By tens, hundreds and thousands.
Level 3: Multiply by 25 and 50.
Level 4: Multiply by .1 and .01.
Level 5: Multiply by .5 and .25.
Level 6: Product of three factors.

GRAB THE BARRELS WITH THE GRAPPLE

HINT

Some of the levels have a Hints button *with advise as to how to solve the equation more quickly.*

Academic Objective:
Practice **division** mental calculations.

How to play?
Grab the barrel carrying correct answer as quickly as possible. Keep the sea lion from reaching the other side or he cost you points.

The hint button is next to the theory icon.

Exit

Time control . Here you can enter the labyrinth.

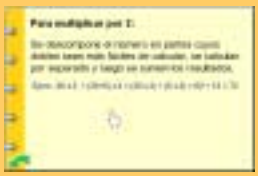
5 Levels of difficulty:

Level 1: Divide by 20.
Level 2: Divide by 25 number with two 0's.
Level 3: Divide by number with 0 in ones place.
Level 4: Divide by 40.
Level 5: Divide by 50.

BREAK THE ICE

HINT

Some of the levels have a Hints button *with advise as to how to solve the equation more quickly.*



Academic Objective:
Learn to workwith order of operations.Learn to work with parenthesis within order of operations. Stimulate quantitative thinking.

How to play?
Break the ice carrying correct answer as quickly as possible. Keep the crazy penguin from reaching the other side or he loose you points.

The Hints are next to the Theory.

Keep the penguin from reaching the other side .

Time control

4 Levels of difficulty:

Level 1: Addition and subtraction.
Level 2: Addition and multiplication.
Level 3: Addition and multiplication.
Level 4: Addition, subtraction, and multiplication.

THEORY, TEST AND PROBLEMS

Access the Tests on the time machine, the Problems and the Theory.

Theory

Test

Simple problems

Complex problems

THEORY

SKILLS

Short and long term memory
Comprehension

Concentration and attention

Reproduction

Academic Objective:
Foster capacity and stamina for problem solving.

How to play?
The activity is presented with a brief content guide, which summarizes pertinent content. Content reviewed in this manner is noted on their progress grid with a green check mark. To be awarded the diploma and to earn the 5 precious stones found in the theory section students must read the review. The green check mark will appear after a reasonable amount of time has passed for the reading to have ocurred.

General contents

Previous page

Exit

When pipo thinks you have read the section he will give you a green check mark.

Go to next theory page.

It is not recommended that the student read the theory summary all at once, it is best read at the beginning of a new activity, or when in doubt if taking a test.

TEST

SKILLS

Concentration and attention

Estimation

Abstraction

Comprehension

Deductive thinking

Academic Objective:
Internalize big content ideas.

How to play?
Choose one of the six options Pipo gives you. There are no levels on the tests, but you can see how many more you need to master the section.

Basic Operations

Geometry and fractions

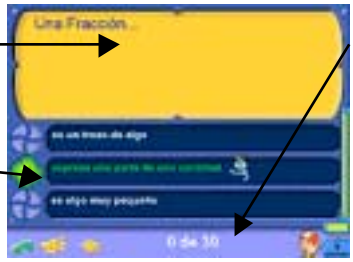
Tally number correct out of total to be worked.

Measurement units

Number System

Organisation of information

After choosing the desired section, the program will return to a screen where you will find a problem and three possible responses. It is not necessary to complete the test all at once, the program will recall the last question you completed correctly.



Click here if you need Pipo to repeat question.

Select one of three options.

Tally number correct out of total to be worked.

PROBLEMS

SKILLS

Comprehension
Interpretation
Logical mathematical

Reasoning

Attention and deductive thinking

Composition and decomposition

Academic Objective:
Solving simple problems, applying basic operations. Fostering development of personal strategies

How to play?
Having selected between simple or complex problems put to use everything you have learned to solve the problems.

Calculations are done with a **calculator** and recorded on the ship's log. The final answer is recorded on the results zone. Click on the green arrow if you think you have found the correct answer. If correct, Pipo will give you access to the Units option.

In the problem solving process we have tried to differentiate between computation and appropriate application to a problem situation. Many activities have already engaged students in basic computation practice. For this reason in the problem solving section the focus is on appropriate application.

All calculator work is stored here.

Click on green chekmark if you have correct answer.

Calculator

Label your answer appropriately.

***Click* on Nº**
At times it is faster to use the numbers to the right of the keyboard. Activate with BLOQ NUM keys.

Simple Problems

3 Levels of difficulty:

Level 1: Addition and Subtraction Problems .
Level 2: Multiplication and Division Problems .
Level 3: Addition, Subtraction, Multiplication, DivisionProblems .

Complex Problems

2 Levels of difficulty:

Level 1: Variety of operations I; Use more than one operation in solution
Level 2: Variety of operations II; Use more than one operation in solution and changes in units of measure

.

SCORING

This progrom diferentiates all students and provides progress reports and scores for each student. This helps students maintain the motivation to continue improving skills in order to move forward.

SCORING

F9 KEY
LOGIC GAMES
See page 20

ENTRY TO THE LABYRINTH

The F9 key takes us directly to the **ENTRY TO THE LABYRINTH**. To enter click on the dungeon doors. Once there you will recognize the games and activities.

Your mission is to destroy Hela's throne, which is hidden behind her door and protected by four magic locks. To destroy it you must recover and decode the runes.

Each labyrinth section is tied to a set of activities. Hela has hidden the runes there.

Progress sheet

Logic games

Through here you will find Hela's door.

The runes will help you open the magic locks.

Progress Page

Parents and educators have access to an organized graph complete with each students scores and progress towards mastery of each objective.

The Labyrinth

Hela has hidden the runes in the labyrinth. To stop her evil plan to destroy the world you must find the runes. They will help you open the door to the throne rom. Once there you can destroy her throne of power. To get to the runes you must get through the cells that can be opened only with the precious stones you win after mastering a level.

The runes are also protected by the ***Portones de Ingenio***, that can only be opened by a special key. Thus your first steps inside the labyrinth, will be to find the keys.

To open the cells you need the precious stones won in the games after mastering a level.

To get the runes you will have to open doors by proving your ingenuity.

The precious stones, labyrinth, and runes are merely a representation of the students accomplishments and progress. However, for students the stones are very motivating and engaging. Parents and educators have access to current scoring/ progress reports they can print. Each has the student's name, the date, and the most current scores, including levels mastered marked with a green check mark. Parents can access this section through the lower right hand corner of the screen.

LOGIC GAMES

Once you have opened one of the Portones de Ingenio they can be accessed without performing the initial entry tasks again. However you can return to engage in the logic activity behind that door at any time thereafter.

The great door of Symmetry

The great door of bars

The great door of Series

The great door of Enigmas

The great door of the beetle

The Great Door of Symmetry

Note the line of symmetry and complete the drawing. Use the machine to select the shapes you need to complete the drawing. You can change the color, reflect the piece, and rotate it to make it fit. Click on the grid when you are finished.

You will have to successfully complete two drawings in order to open the door and get the runes.

Take needed shapes from the machine to complete the drawing.

To erase and start again click on the shape to be erased..

Play two times to gain entry, once for each lock.

The Great Door of the Wooden Bars

Move around the wooden bars to find the key that will open the cell behind this door. The bars move in only one direction. Players must complete two activities.

Click on the bars to move them and click again to release.

To hear the question again click on the sentence at the bottom of the screen.

Each bar can be moved only in the direction marked: vertically or horizontally..

The Great Door of the ENIGMAS

To open this door players must respond to the question. Write the answer or click on one of the three possible answers.

If you do not know the answer click here.

As soon as you respond to the enigma, the correct answer will appear.

The Great Door of Series

Continue the series. Click drag and place the next item in the series where appropriate.

Select your choice click and drag it to it's place in the series.

The Great Door of the Scarab

Move the keys with the help of the scarab and try them in the locks.

Restart the game here.

Here is noted the activity you are currently engaging.

Click here to return to return to previous move.

Players may use the arrows on the bar or on the keyboard.

HELA'S DOOR

Behind this door is hidden Hela's throne of power. Once you have the runes arrange them to decode the magic spell. You must open four locks. When you open the door use the remaining runes to destroy Hela.

You may use paper and pencil to figure out the codes hidden in the runes.

With mastery of the progrom Pipo will present students with a Explorador Matemático 5º curso diploma..

DIPLOMA

Once you have destroyed Hela's throne of power, you will receive a "Diploma de Explorador Matemático de 5ºCurso" with your name and the date you completed the progrom.

You can print the diploma in color or in black and white to color yourself.

TABLA DIDÁCTICA

JUEGOS		HABILIDADES															
		COORDINACIÓN VISOMOTRIZ	MOTRICIDAD FINA Y/O GRUESA	RECONOCIMIENTO NUMÉRICO Y SERIACIÓN	MEMORIA CP O LP (CORTO/LARGO PLAZO)	MEMORIZACIÓN VISUAL Y FOTOGRÁFICA	DISCRIMACIÓN (FORMAS, FIGURAS, NÚMEROS...)	CONCENTRACIÓN Y ATENCIÓN	REPRODUCCIÓN	COMPOSICIÓN Y DESCOMPOSICIÓN	AGILIDAD Y CALCULO MENTAL	RAZONAMIENTO LÓGICO MATEMÁTICO	PENSAMIENTO ABSTRACTO O DEDUCTIVO	ESTIMACIÓN RESULTADOS	INTERPRETACIÓN O CATEGORIZACIÓN	ABSTRACCIÓN	SECUENCIACIÓN O COMPRENSIÓN
	LOS PATOS DE HELGA	■					■			■	■	■			■	■	■
	EL REBAÑO DE FREYDIS		■				■	■	■	■	■	■	■	■	■		■
	INGRID LA TEJEDORA		■				■	■	■			■			■	■	■
	CARGA LOS KNARRS	■			■			■		■	■	■	■	■		■	■
	LOS TRINEOS DE EDGAR Y ERIK	■		■			■					■	■		■		■
	LA CASA DE OLAF									■	■	■	■			■	■
	LA EMPALIZADA DE KAUPANG							■		■	■	■	■	■		■	
	NAVEGA EN DRAKKAR CON SVEN			■			■				■	■	■	■	■	■	■
	EL ALMACÉN DE LEIF	■	■	■					■	■				■	■		■
	EL HERRERO				■	■	■	■	■						■	■	■
	LOS CUERVOS DE ODÍN						■	■		■		■				■	
	SNORRE Y LOS ESTANDARTES				■	■	■	■	■						■	■	
	LA BALLESTA DE THORKEL						■		■				■		■	■	■
CUADERNO ROBOT	RESUELVE LAS SUMAS				■			■			■	■	■	■	■	■	■
	RESUELVE LAS RESTAS				■			■			■	■	■	■	■	■	■
	RESUELVE LAS MULTIPLICACIONES				■			■			■	■	■	■	■	■	■
	RESUELVE LAS DIVISIONES				■			■			■	■	■	■	■	■	■
	IMPRIME TUS HOJAS DE EJERCICIOS											■	■				
CÁLCULO MENTAL	EL ATAQUE DE LOS TRONCOS	■	■		■			■		■	■	■	■	■			
	DALE AL OSO	■	■		■			■		■	■	■	■	■			
	LAS FOCAS	■	■		■			■		■	■	■	■	■			
	RECOGE LOS TONELES CON EL GARFIO	■	■		■			■		■	■	■	■	■			
	ROMPE EL HIELO	■	■		■			■		■	■	■	■	■			
	TEORÍA				■			■	■			■	■			■	■
	TEST				■		■	■			■	■	■	■		■	■
	PROBLEMAS				■			■		■	■	■	■		■	■	■

CREDITS

Legal Deposit: PM 2057-2005 ISBN 84 95370-26-3

www.pipoclub.com

Produced by: CIBAL Multimedia S.L.
Original idea and direction: Fernando Darder
Original graphical creation: Eva Barceló
Melodies: Pedro Darder
Graphical design, illustration and animation: Eva Barceló, Javier Liébana, Miquel Albertí
Pipo's voice Spanish: Aina Cortés
Cuca's voice English: Frances McMahon
Programming: Fernando Darder, Miguel Ángel Ferri, Marc Puig, Alicia González,
Juan Gabriel Covas
Sound technician: Pedro Darder, Miguel Ángel Ferri, Marc Puig
Psychopedagogical consultant: Fernando Darder, Mónica Pablos
Contents revision: Catherine Cobb
Contents learning guide: Mónica Pablos
English translation: Lesley Ann Daniels
Commercial direction: Domingo Sanz
Commercial department and management: Pilar Gómez, Domingo Sanz
Collaborators: Carlos Darder, Aina Darder, Toni Darder, Pilar Gómez,Carlos Darder, Inés Gracia, Miquel Albertí.