



GUJARAT COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING



EDUCATIONAL KITS

Exhibiting School Projects

(Stand 1: Representations 1 - 14 of 28)

Coordinator

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Details of Toy (Toy Category: Education Kit)

Sr No. **Toys Picture**

1

Tovs Name

Learning With Fun

MATERIAL

Useless wooden bars of furniture, hooks, carrom coins, red, green and yellow colors

HOW TO PREPARE

After the renovation of the building in 2016 there was remained useless wooden strips that were kept in the store room, from which I cut small vertical square pieces with a saw. The wood edge was not scratched so polishing. After that it was painted with screw shaped hooks. It was fixed alphabetical and numeric on it. Then for the Toy Train, Rope Way, the wooden bars were paired with each other and the hooks were attached to the tires of the carom coins.

Model Description

ABCD can be taught easily by Train, Rope Way and Board.

- > The order of ABCD can be taught by arranging the letters of ABCD randomly.
- > After learning the order of ABCD, you can teach spelling according to the order of the dictionary. Which train compartment will come first according to the dictionary?
 - > Spelling from letters can be practiced.
- > Toy Train and board can also be used to teach the line.
- > The word of the sentence on the train or board can be taught by arranging it randomly.
- > How many spellings do children make using a letter in 1 minute? That kind of one minute game can be played.
- > Apart from this, numbers can be taught and addition, subtraction, multiplication and division can be taught.
 - Braille language very useful
 - ➤ Mirror effect also useful for NMMS & PSE.

LEARNING OUTCOMES

ABCD sequence, dictionary sequence, spelling, mirror effect, syntax, syntax sequence, spelling game, numbers, addition, subtraction, multiplication and division can be taught in a variety of ways by hanging letters with a toy train, rope way and a hook on the board.

Contact details

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Toys Picture









Toys Name Education Kit

MATERIAL

Toys have been made using a lot of waste items from the surrounding environment, such as paper, beads, cartons, wooden pieces, waste spoons, ice cream sticks, balloons, empty bottles, lids, magnets, cords, old toys, beads., Etc.....

Model Description

- ➤ About 200 toys are made from waste material. , Which were also kept in different kits such as magnet toys, air pressure, optical illusion, puzzle, magic toy sections were made into boxes.
- ➤ Various toys have been made at low cost (less than Rs. 100) for teaching using technology. With the help of these tools like 3D box, digital archive, digital microscope, hologram machine, mini projector, mobile TV box etc., children are getting digital education on their own.
- ➤ Kits of each unit with manual card of each standard have been made so that the children of standard 6 to 8 can easily experiment in science subject and make toys corresponding to that subject. Children can do a lot of experiments and activities on their own with the help of a lot of waste items from the surrounding environment and make toys. All the toys shown here are simple and easy to make and can be made in just 8 to 10 minutes.
- ➤ Furthermore, since the design is simple, it can be made just by looking at it. Each kit includes a guide to use.

LEARNING OUTCOMES

- ➤ Kits of each unit with manual card of each standard so that children of standard 6 to 8 can easily do experiments in science subject and make suitable toys to the subject.
- ➤ The student's interest in the science subject increases and the children learn various science theories easily while playing.
- ➤ Long remembered by a self-made toy.
- ➤ Cultivate an accurate society in the subject based on experience.
- ➤ To ensure that students are not deprived of experimental and empirical knowledge.
- ➤ Science and technology is a subject that not only becomes a hobby but also easily understands the unit and does other activities besides the unit.

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Toys Picture









Toys Name Number System Converter

MATERIAL

➤ Wooden or hardboard, wooden counters with holes or beads of same size, wooden strips for pegs, stickers labelled with numbers: 1,2,4,8,16,32,64,128,256,512, 1024,2028.

HOW TO PREPARE

In this toy, a number of uniform circular counters with holes at the counters are used. The height of the counter is taken as a unit. These counters are stored along a long vertical rod mounted on a circular platform. There is another rectangular platform of the same height in which vertical pegs are installed with heights 1,2,4,8,16... units.

Model Description

- Now a days, human beings are mostly depend on the electronics gadgets. These electronics gadgets/ devices are works on electrical power. Electronics power has only two state " on " and "off". Which is represented by 1 and 0 respectively and it is binary number system.
- In mathematics and digital electronics, binary number is a number expressed in the base 2-number system or binary number system which uses only two symbols "0 "and "1".
- Binary numbers are the flow of information in the form of zeros and ones used by digital computers and systems.
- In electronic circuits and systems binary System is used.
- To work with electronics it is required to understand binary number system .

To convert a decimal number into binary form, we take the same number of counters on the vertical rod, and start with the longest peg. Compare the height of the counters in the rod with that of the peg. If possible, transfer the counters along the peg till it is fully occupied. If this cannot be done leave it vacant and proceed to the next page. In this way counters are arranged along the various pegs either fully occupied or totally vacant. At the end of the process, start with the longest peg, fully occupied write 1. Proceed towards the next peg and write "0" if it is vacant or "1" if it is fully occupied. Repeat the process till you reach the shortest peg.

LEARNING OUTCOMES

Students can convert decimal numbers into binary number system.

Students can understand different types of number systems and identify the number system.

Develop logical, problem solving skills, higher order thinking and innovative ability.

Students can learn with fun, logic, and magic.

Students can make magical and logical cards for age group, height, weight, temperature and different menus of price list.

Students can know mechanism of electronic gadgets. Students use different number systems in daily life and make a change.

Any other detail for share:-

Students can convert decimal numbers into binary number system, octal number system and hexadecimal number system and vice a versa.

They can add and subtract binary numbers with this toy. In Decimal number system we use ten symbols :0,1,2,3,4,5,6,7,8,9 and base is 10

In Binary number system we use two symbols :0,1 and base is 2

In Octal number system we use eight symbols :0,1,2,3,4,5,6,7 and base is 8

In Hexadecimal number system we use sixteen symbols :0,1,2,3,4,5,6,7,8,9,10=A, 11=B, 12=C, 13=D, 14=E, 15=F and base is 16

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Toys Picture







Toys Name MATHS SCIENCE EDUCATIONAL SAPSIDI

MATERIAL

Cardbord, White paper sheet, Glue, Sketch Pen and Colours

HOW TO PREPARE

A sheet of cardboard of suitable size was taken and a sheet of white paper was

glued on it and various sapsidi game were made from the unit of maths and

science of std 6 to 8 level. The name of game is like 'Get to know me' "Animate

-Inanimate", "Tell Me Who I Am", "Our Solar System", "Save Environment",

"Move Back and Forth" Animal World" are made . The total number of game is

23 . the rule of playing game is glued on the back side of game board so student

can easily read and play game self without any help of anyone.

Model Description

- Learning through sport is an important stage in a child's development. Toys
- and games help children to develop their sense, problem solving, conflict
- resolution, and many other skills. As a part of this, the aim is to provide
- maximum enjoyable education to the children by creating educational sapsidi
- in form of educational kit.

LEARNING OUTCOMES

- Educational tool for fun games of maths and science for children of standred 6 to 8
- Easily transferable as well as a low cost educational tool for children
- Knowledge from games
- Effective use of time of school recess as well as free lecture
- Learning Outcome based educational game for std 6 to 8
- To help the development the High educational value, imagination, logical thinking

Contact details

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Toys Picture







Toys Name

Motor skill development toys

MATERIAL

Acrylic Sheat, colour , scissor, fevicol

HOW TO PREPARE

Picture puzzle: Picture paint on acrylic sheets is made of 4 pieces, 8 pieces, 16 pieces, 24 pieces.

Puzzle house: - To make a house on acrylic sheet, you have to arrange the

pieces on the sheet. And to make a house.

Block Puzzle: A block made of acrylic sheet, can be arranged and made into different things.

Marble Puzzle: Made on acrylic sheet. To play with

marble.

Model Description

Picture Puzzle: To complete a picture by pairing a piece of a picture.

Puzzle house: to build a house.

Block puzzle: Block will make a pair of different things.

Marble Puzzle: Will play with the help of marble.

CARE WHEN USE OR PREPARE:-Becomes interesting and exciting.

The child is tempted to play.

Care is taken to make it durable and easy to use.

LEARNING OUTCOMES

Brain develops.

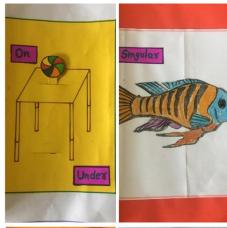
Eye consentreat power will increase.

Contact details

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Toys Picture







Toys Name

Opposite Words

MATERIAL

MS Paper, Hard sheet, Sketch pen, Fevicol, Colour page, White page, Paper Cutting (Old books), Scissors, Thread,

HOW TO PREPARE

The different pictures are cut from the old books and pasted them on colouring paper with artistic way. The pages are pasted on hard board. They are made attractive using sketch pen. The pictures are also used to make a pocket book.

Model Description

This educational kit is made in such a way that the students of std. 6 to 8 are able to use easily. The students will be attracted to learn different words and they will learn with play. The students will be able to understand the meaning of the English words themselves with the help of given pictures.

CARE WHEN USE OR PREPARE:-

It is made up of papers and colour. It should be use with care so that the papers or pasted pictures cannot be torn or faded.

LEARNING OUTCOMES

Learn opposite words using card/picture
Know new words
Increase vocabulary
Learn to speak short sentences based on picture
Learn preposition (In, on, under etc.)

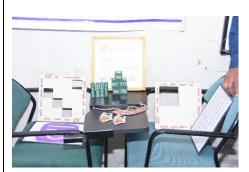
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Toys Picture







Toys Name

Logical Toys

MATERIAL

Hard Board, Card Sheet, Rope, Nail, Gum, scissors **HOW TO PREPARE**

Prepare 3 square plate. Make cut on two square according to figure. Prepare one square like a tray. Write down 16 words and write 4 words on each side of square accordingly

On Cardsheet write 0 to 99 numbers and correspond symbols according figure. Also prepare one prediction card.

Model Description

Show plate and ask to spectators to choose one word.then show two square plates and tell him to indicate his chosen word on which side.as spectator shows side performer puts reverse the plate and put it into tray.Toy it self shows chosen word.

LEARNING OUTCOMES

joyful learning of mathematics. They know about binary number system.

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Toys Picture

Cotes Cotes





Toys Name

LADDERS KITS & FEATHERS HEREARIUM

MATERIAL

HARDBOARD, ACRYLIC, FEATHERS, PHOTOS OF BIRDS, FEVICOL, COLOURS, PAPER, ALBUM, WASTE WOODEN PIECES.

HOW TO PREPARE

- 1. DRAW THE LADDER AND WRITE THE ACTION WORDS ON IT. PASTE PICTURE OF DIFFERENT THINGS ON IT. THEN TAKE ITS PRINT OUT.PAST THE PRINT ON HARDBOARD AND WRITE THE RULES OF PLAYING THE GAME.
- 2. TO COLLECT FEATHERS FROM LOCAL ENVIRONMENT.
 THEN IDENTIFY THEM AND MAKE THE HEREARIUM.
 WRITE THE ALL INFORMATION ABOUT THE BIRDS AND
 PASTE THE PICTURE OF THE BIRDS AND THEIR
 FEATHERS.

HOW TO USE

- 1. TO LEARN SYNONYMS AND ANTONYMS IN ENGLISH, TO LEARN ODD AND EVEN NUMBER IN MATHS WITH THE HELP OF THE LADDERS.
- 2. TEACHER/ STUDENT PRESENTS THE FEATHER
 HEREARIUM. TO LEARN ABOUT THE ENVIRONMENT AND
 THE BIRDS IN DETAIL WITH DISCUSSION, OBSERVION AND
 QUESTIONING.

LEARNING OUTCOMES

- TO IDENTFY THE ACTION WORDS AND DO THE ACTION.
- 2. DO THE PRACTISE OF MATHS TABLE, ODD AND EVEN NUMBER,

FACTORISATION AND PARTS.

- 3. TO KNOW ABOUT LOCAL ENVIRONMENT AND THE BIRDS.
 - 4. DO OBSERVATION AND EXPLORATON.

Contact details

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Toys Picture







Toys Name

Khul ja sim sim

MATERIAL

Hard board, Postal colour, Mack pen. disposable glass, marbles, the Thread, Colour paper, Fevicol, small pebbles

HOW TO PREPARE

Make rectangle box from hard board. Stick colour paper on it with fevicol. Make two glass size holes on the top of the box. Now stick glasses there with fevicol, Now Colour one glass with red colour and other colour with blue Colour. Now make a drawer in opposite to box and place a tray can be pulled at the toy is "khul ja sim sim".

Model Description

Place 3 marbles in blue glass and 5 marble in red glass. Now All marbles will reach to tray. Now pulled the tray and take marble and count them.

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Toys Picture







Toys Name

Parking puzzle

MATERIAL

- (1) Empty bottle, empty refill of ballpoint pen, balloon
- (2) Square piece of waste plywood, paper, favicol
- (3) "Kanaiya" who knows the number
- (4) Disco Dancer
- (5) Number line comb
- (6) Self-powered footwear

HOW TO PREPARE

(1) The baby model is made by cutting the waste bottle.

The bottom of the

bottle is left open. A pipe is inserted into the upper lid, the lower end of

which is inside the bottle, and the upper end is fitted with a balloon.

(2) Take a square piece of waste plywood of 20 * 20 cm and leave 3 * 3 boxes

open in the middle. And a box is kept open all around.

The open

compartments serve as parking lots. In the total nine boxes in between,

square pieces of Sanskrit like mi, wa: m:, si, th:, th, ti, t:, anti are arranged in reverse.

(3) Below the statue of Kanaiya is a magnet. The blade is placed between

two round pieces of paper. And plastic lamination by writing whole squares

on one side and integers on the other side of the paper.

Except for other

whole squares and whole cubes, the card does not have a blade.

(4) The baby model is made from a piece of wire. In which rubber is used as

weight on the following two ends. A piece of wire is tied in the middle.

Which acts as the center of gravity. The baby's face is made at the top.

(5) Positive, 0, and negative numbers are indicated on the old comb with

large teeth. The unit distances the arrow above the pipe to move left-right.

(6) On the inside of the empty ceiling taprol, two small wooden rods are

fitted on top and bottom. The human steps are cut and fitted from the thick

paper of the West Kankotari on both ends.

HOW TO USE

(1) Dipping the bottom open part of an empty bottle into water causes the air

inside the bottle to go into the balloon through a pipe, resulting in the

balloon inflating. So it seems that if the child is not bathing in cold water,

his chotli will arise. Kids unintentionally air is everywhere which matter

easily know with fun.

(2) The kids take the cards to the parking station and try to make the correct

arrangement based on the man and the promise. In which their reasoning

power develops and the arrangement of suffixes can be remembered while

playing.

(3) Placing Kanaiya's idol on the card attracts the card because of the blade. ,

And can easily identify integers and integers. Children can learn about

these numbers in this way while playing.

- (4) Put The baby model on stand. Now move slowly. It will be dance freely.
 - (5) Students do plus and minus by arrow easly with fun on comb.
 - (6) Pushing the round part of the taproll on a smooth surface automatically

releases the wheel of the taproll and the steps attached to it are also seen

to move automatically. It is a pleasure to watch this model.

LEARNING OUTCOMES

- (1) Students can knows that "Air is every where."
- (2) Develops an understanding of the suffixes behind the sentences-based word.
 - (3) Children recognize whole numbers and integers.

(4) students can knows gravity point of thing.

- (5) Knows the number line and can substract sums with its help.
 - (6) Children understand the principle of lifting

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Toys Picture







Toys Name

Learn History by Playing

MUGAL COLUMN

Material used : Wasted cack stand, paper, cardboards, hook

Lets play (play as team)

The Children will take cards corresponding to the lifetime of the

kings

After reading the cards, he will put the card in front of the photos

of the kings according to the information.

5 points for correct cards and (-2) points for false card
Concept- Will get information about Mughal kings.

Disk Game

Materials used- Paper, Lamination paper. Let's Play- (for two children)

The Teacher will place the name of the social reformer on the display board.

The children will organize all aspects by reading the information corresponding to the photos.

The child who make the wrong pass will be dropped from the game.

Concept-Children will learn about social reformers, strengthen and evaluate them.

The game of Pyramids

Materials used – Paper, Velcro strip, cardboard let's play (for two or more children)

Put a photo of the revolutionary on the pyramid and throw the

child away.

The child will recognize the photo and affix the corresponding card

with his name of the pyramid.

the one who completes the pyramid first by inserting the correct

card will be considered the winner concept-children will receive information about our revolutionaries

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Toys Picture







Toys Name

EDUCATIONAL PUPPET KIT

MATERIAL

Coloured paper, favicon, scissors, footboard, drawing paper, cloth, Needle thread.

HOW TO PREPARE

Making stick puppets with the help of drawing paper and bamboo, making puppets out of paper, making gloss puppets out of cloth,

making flying cocktail puppets out of card paper. Making a bird puppet out of card paper.

HOW TO USE

Unit Study, Teaching, Storytelling, Introducing, Prayer Program, Drama, Joyful Teaching, Active Learning.

CARE WHEN USE OR PREPARE

Finger movements, hand movements and utterances.

LEARNING OUTCOMES

Students learn by communicating. Students get enjoyable learning all the time. Students like school.

Students will be performing. Students will be playing plays. Fundamental power will be developed.

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Toys Picture







Toys Name

Amazing Toys

MATERIAL

- Disused plastic bottles, stones, Shells and items from the surrounding Environment

HOW TO PREPARE

- 1. Ghunghroo Take an empty plastic water bottle and then put small and colorful stones, shells in it, Attach it to the lid with a stick and decorate it by using colorful tapes and ribbons.
- 2. Magic Car Glue two straws at the top of the bottle, attach balloon at one end of the straws. Then with the use of bottle caps make wheels and attach it to the bottom part of the bottle. Blow air though the straw and expand the ballon. Then close the other end of the straw and place it on the car will start running.

LEARNING OUTCOMES

- 1. Children get acquainted with the prevailing desi toys.
- 2. Creativity in a child through an active / dynamic toy.

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Toys Picture







Toys Name SCIENTIFIC TOYS

MATERIAL

PLASTIC BOTTLE, BOTTLE CAP,CYCLESPOKES,WIRE,PAPER,STRAW, TOOTHPASTEBOX,CARDBOARD,FEVICOL

HOW TO PREPARE

Creative toys can be prepared using simple tools such as cycle

spokes, used bottles, wires and straws.

HOW TO USE

Students can play with these toys by turning the handle of the toys and

Learn various principles of science.

LEARNING OUTCOMES

1.Inculcate scientific reasoning in students.2.Encourages play ful learning in students.3.Students can easily learn about the working principles of simple instruments.

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