



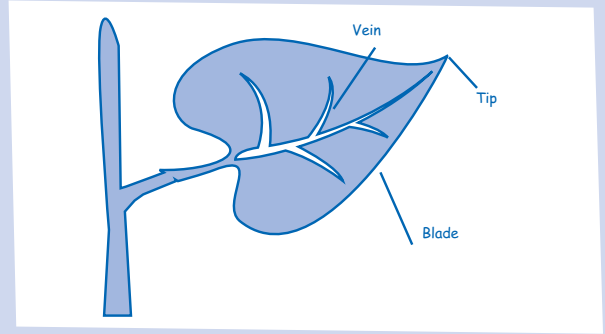
Learning from Nature | فطري ماحول ۾ سڳيا لاءِ پنڌ

An Educational Resource for Children | ٻارن لاءِ سڳڻ جو مواد

1



Structure of leaves



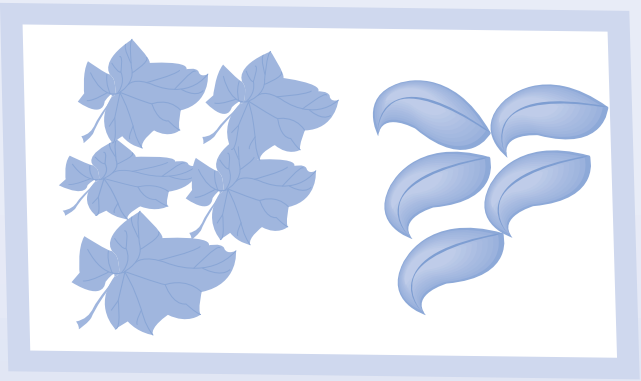
Give the children a variety of leaves along with pieces of paper. Instruct them to place a piece of paper on top of a leaf and gently stroke their pencils on the sheet. As they do so, a sketch of the leaf will start to appear on the paper much to the amusement of children. After this exercise, discuss the different structures of the leaves with children.



2



Sets & Distribution



Hand every child a varied assortment of leaves. Before starting the activity, explain to children the concept behind making sets and groupings. Once they carefully observe the leaves, children will make sets based on their similarities. Do your best in guiding them during the course of the activity.



3

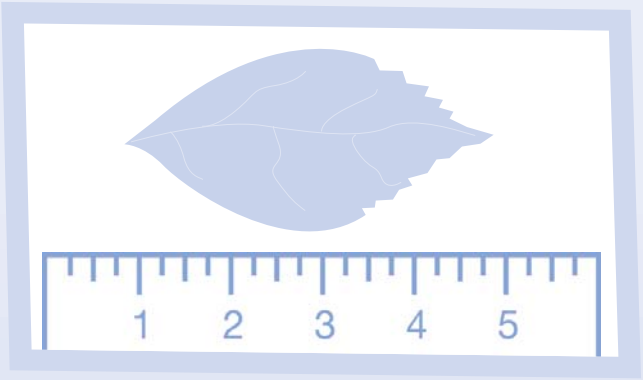


Comparison

Put an assortment of leaves in a basket and ask the children to pick any two of their liking. Every child after carefully observing the leaves will make a presentation to highlight the similarities as well as the differences between the two selected leaves.



4



Measurement

Ask the children to put a leaf on a piece of paper and using a pencil put marks on the paper on both sides of the leaf. Instruct children on how to measure the distance between the marks (a piece of wood or thread can also be used for this purpose). Using this activity, children can learn how to measure the length and width of an object.

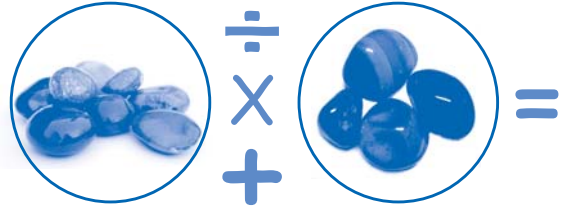


5



Counting, Addition, Subtraction

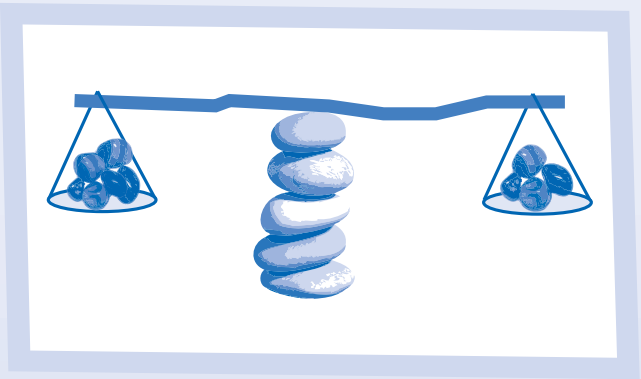
Draw two circles on the floor with a piece of chalk. Put a different number of stones in both the circles. Ask children to count the number of stones in the circles and determine which circle has more stones and which has the lesser number. Now instruct them to distribute the stones in such a manner that at the end of the exercise both the circles have an equal number of stones.



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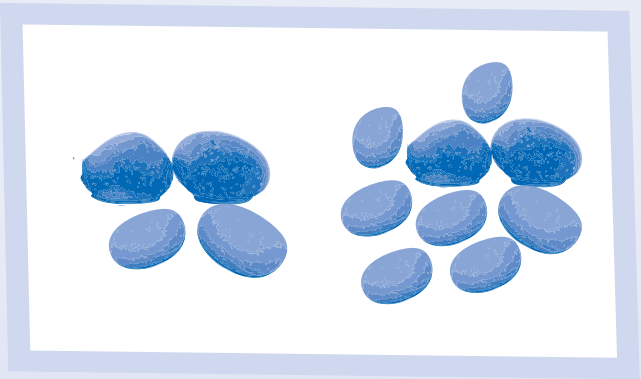
Measuring Weight



Take a sturdy stick of wood and place it on a little pile of stones. Take container lids and hang them with a sturdy thread on either side to serve as a weighing scale. Ask children to put in stones on both sides of the scale until they can achieve balance. Ask them to count the number of stones put on both sides (which will be different due to their various sizes and weight). The exercise will illustrate the concept of weight and its measurement.



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Odds & Evens

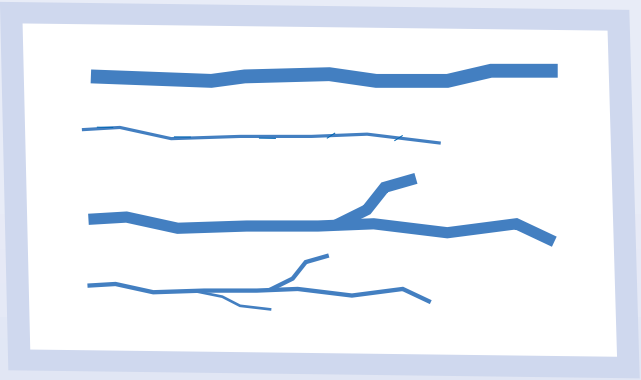
The concept of odds and evens can be explained through the simple use of stones. Give the children a number of stones and tell them to place the stones in pair of twos. The last stone without an accompanying pair will be the odd one out. This will serve as an example to clarify the difference between odds and evens.



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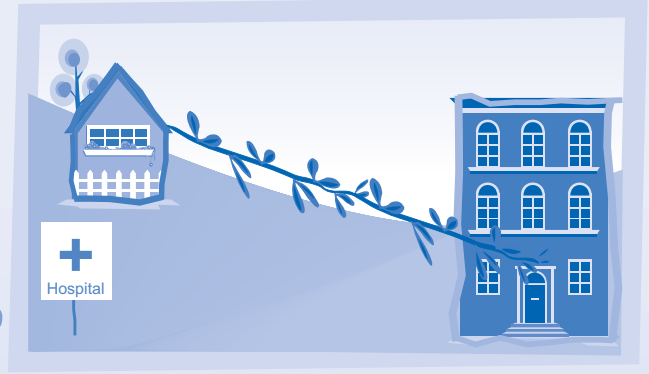
Measuring Tools



Ask the children to gather dry leaves branches of varying sizes for this activity. Tell them to compare the sizes of the branches to determine which ones are longer and which ones are shorter. Instruct them to match the branches which are roughly equivalent in size. Afterwards ask them to use the branches as a means of measuring different objects in the classroom. This will clarify the basic concept of measurement.



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Map/Sketch

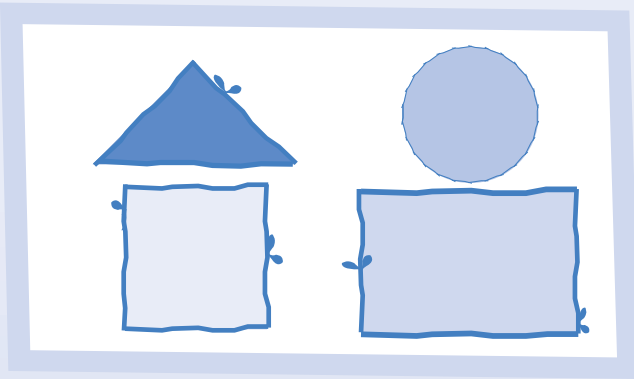
Explain to children the concept behind maps and sketches. Then ask them to make a rough map of their route from their homes to the school. They can use twigs, leaves and stones to mark the places. Use these natural materials to signify other landmarks (e.g. mosque, hospital etc.) on the map. Then discuss with children about the location of these places with reference to their sketch of the route.



10



Shapes



Ask the children to construct different shapes (rectangle, triangles, squares) on a flat surface using branches, twigs or any other materials from their surroundings. The activity will help children learn how to make basic shapes and also enable shape recognition.



11



Picture Frame

Ask children to gather different dry tree branches and observe their structure and also compare the differences in shape, size, color between the branches. Guide the children on how to make a picture frame with the help of these branches (rectangular shapes) and then discuss the importance and utilization of frames.



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Fractions

The concept of fractions can be explained by something as simple as a newspaper. Take a newspaper and fold it at a time to a half, one third and one fourth of its size to clearly demonstrate the rationale behind fractions.



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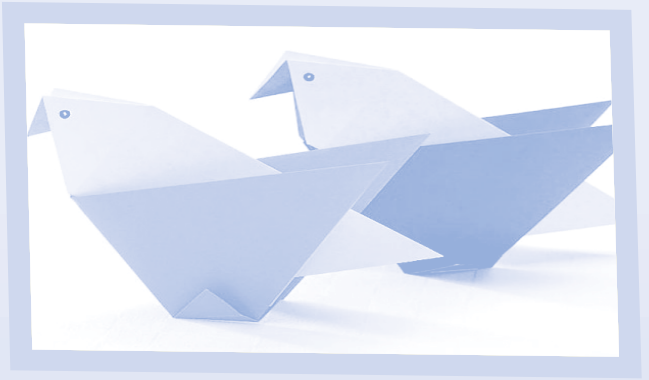


Recycling

Children can be taught how old newspapers can be used to make boxes look a lot nicer. Tear an old newspaper into little pieces and stick these to the boxes with the help of glue. Afterwards, take a piece of coal and rub it on a bit of cloth. Use that cloth and rub it on the newspaper pieces stuck to the box to give it very nice artistic shades of black and grey. The end result will look very pleasing to the eye.



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Origami

Children can be taught how to make puppets through old newspapers. This art of paper craft is called 'Origami'. Things made from paper can help tell stories and also be used in show & tell activities. Origami can also be utilized for the purpose of decoration in classrooms.



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Geometry

Old newspapers can be used to make different geometrical shapes and enhance shape recognition in children. Use the newspaper to make different geometrical shapes by folding them in the appropriate manner. Children can learn how to make these forms by watching and also learn the proper names of the given shapes. To further clarify the concepts, assign different tasks to children for example making a smaller square out of a larger one without cutting the newspaper.

Polygon



Rectangle



Circle



Triangle



Square



Pentagon



Hexagon



Octagon

Geometry

Solids



Cube



Sphere



Cone



Pyramid



Cylinder



16



Picture Story Book

News stories and picture clippings can be taken out of old newspapers for the purpose of learning. Instruct children to cut out news stories and pictures out of newspapers and use these to start creating their very own picture book. These books can be used to tell stories to children. Since the children create these books on their own their learning will be enhanced further.



Learning from Nature | فطري ماحول ۾ سکيا لاءِ پنڌ

An Educational Resource for Children | ٻارن لاءِ سکڻ جو مواد

سنڌ ايجوڪيشن فائونڊيشن حڪومت سنڌ، صوبي اندر بنيادي سهولتن کان وانجهيل علائقن ۾ تعليمي سهولتن جي پهچ کي وسعت ڏئي رهيو آهي. سنڌ جي انهن ڀٽي پيل علائقن ۾ تعليمي مواد جي کوٽ سبب سکيا جو مرحلو منجهيل ۽ ڏکيو نظر پئي آيو. ان حوالي سان جڏهن سکيا جي مواد ۾ بهتري ۽ سولائي آڻي ته فائونڊيشن سکيا واري مواد کي مهارتن ۾ اضافي ۽ بهترين سکيا جي ٽول طور تي شامل ڪيو. ان سلسلي ۾ فائونڊيشن جي مهارتن جي سونهن سان سنواري، لرننگ سپورٽ يونٽ (ايل ايس يو) پاران ٻارن جي بهترين سکيا جيڪا گهٽ لاڳت جي مواد ذريعي ٿي سگهي ٿي وارو مواد تيار ڪري ٻارن کي راند روند ۾ سندن لکيل صلاحيتن کي اپارڻ لاءِ ڪوششون وٺي رهيو آهي. هي مواد پڻ ان سلسلي جي هڪ ڪڙي آهي جنهن ۾ سکڻ جي حوالي سان ٻارن لاءِ سرگرمين کي خصوصي انداز ۾ تيار ڪيو ويو آهي، اهي سرگرميون راند روند وسيلي ڪيون وينديون جنهن سان اهي ڀرپور طريقي سان سکيا حاصل ڪري سگهندا ۽ ٻين کي پڻ سيکاري سگهندا. هنن سرگرمين ذريعي ماپ، جوڙ، ڪٽ، وزن، سيٽ، ونڊ کي بنيادي تصورن سان گڏ سيکاريو ويندو جيڪو سندن ذهنن ۾ هڪ بهترين يادگيريءَ جيان رهندو. اهي سڀئي سرگرميون بنا لاڳت واري مواد جهڙوڪ: ننڍڙين ڪانين، پنن، پٿرن وغيره سان عمل ۾ اينديون ۽ اهو مواد اسڪول جي آس پاس مان سولائيءَ سان ملي ويندو. هن عمل ذريعي ٻارن کي سندن ارد گرد جي ماحول ۾ پيل انهن شين جي اهميت ۽ انهن جي مثبت استعمال بابت پڻ ڄاڻ ملندي. اسان اميد ٿا ڪريون ته استاد صاحبان هن مواد جو ڀرپور استعمال ڪري ٻارن کي سکيا واري ماحول ۾ وٺي ويندا ۽ سندن سکڻ واري مهارتن ۾ اضافو ڪندا.

The Sindh Education Foundation, Government of Sindh, extends educational opportunities for marginalized communities across the Sindh province in Pakistan. Lack of educational resources in these remote localities sometimes makes learning extremely difficult. In order to improve the quality of learning, the Foundation emphasizes both the availability of and the capacity for optimal use of learning aids. The Foundation helps stimulate creative learning in children to awaken their potential in education and play through the use of low and no-cost materials.

This resource comprises 16 educational cards with activities that are specially designed to be a source of learning for children through the element of play that they will actively participate in. Through these exercises, basic concepts of measurement, addition and subtraction, weight and sets distribution are explained and reinforced for the children's benefit. All of these activities can be executed with the help of no-cost materials (branches, leaves, stones) that can be gathered from the surrounding environment. This not only removes any barriers to accessibility that specialized equipment may promote but also encourages the children to interact with and appreciate more their surroundings.

We hope that teachers will use this resource to ensure an enriching and engaging learning experience for children.

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