

Getting Wild with Maths

There will be children in your setting who are entranced by monkeys, elephants, tigers, lions and other wild animals, so why not set up a jungle scene? A fascination with jungle animals combined with children's normal curiosity makes it an ideal focus for experiencing maths.

All children learning maths need opportunities to experiment with a variety of materials, including found and recycled items such as boxes, buttons and string to experience shape and construction; and natural items such as pebbles, twigs and shells to arrange and count, as well as collections of the more structured maths wood or plastic materials. When we provide children with imaginative indoor and outdoor props it really stimulates their creativity and supports their learning, and nowhere does this show more than in problem-solving and in developing mathematical skills and understanding.



Venture into the jungle with **Carole Skinner's** menagerie of animal-themed activities...

Where's the maths?

1. ANIMAL MAGIC

Invite children to create a jungle environment from natural and found materials. Give them time to explore and discuss how they might be used. Resource the area with materials such as tablecloths, sheets and blankets for constructing home-made tents or caves for stuffed toy jungle animals to live in. Extend children's vocabulary by offering measurement words, questions and statements such as "I wonder if the curtain is long enough?" or "Do you think the cave is too narrow for both bears to live in?"

Use your creative area to produce scenery for the jungle. Paint long grass by winding elastic bands around a cylinder such as a rolling pin, rolling it in paint and then over a long strip of paper. Mix together PVA glue, paint, sawdust and a little water to make textured paint for trees. Hang cut-out spirals from trees as snakes.

Use an extra large piece of cardboard to make an animal hide for children to sit inside and pretend to see wild animals. Cut out a lookout window and resource with animal posters and clipboards for children to record what animals they 'see'. Make sure that there are enough binoculars and cameras on hand to view any jungle animals.

Create animal role-play outfits from pieces of fake fur fabric with Velcro on the corners so that they adhere to the front of the children's clothes, and together make animal tails from stuffing old tights with crumpled newspaper. Use the language of measurement to talk about how long a tail needs to be. Provide materials to make animal masks.

2. NATURAL APPEAL

Natural resources provide a wonderful starting point for problem-solving, sorting and classifying in the jungle. Seeds, pods, conkers and cones, as well as leaves and twigs, can probably be easily collected by children from the local area. Lay out travelling rugs in the jungle for children to sit on, and show them how to use hand-held and standing magnifiers and viewers to reveal any texture, patterns or marks on the items. Add mirrors of different shapes and sizes to reflect the collections. Children can use their collection of twigs and sticks to build a beetle house.

Provide other collections of appealing and stimulating objects for children to talk about, count, rearrange and put in order. Make number labels to hang in the jungle area and include a 1-10 number track to walk along. Gather some smooth pebbles (the ones from garden centres are very good). Encourage the children to handle the pebbles and talk about their colour, size and texture; pour water over some of them and discuss the difference between the wet pebbles and the dry. Use the pebbles to outline a pathway through the jungle for the children to follow. Paint some stones and turn them into ugly bugs.

3. OUTDOOR ADVENTURES

There's huge potential for developing a jungle in outdoor areas. Use camouflage net and bamboo or bead curtains to contain the jungle. You might be able to include a climbing frame as part of the jungle. A small tent erected in the area will make an exciting place to share stories, especially if you include torches and mosquito nets. Ask the children to make a trail round the jungle using arrows made of twigs. Create maps to follow on safari and take photos of animals you 'see'.

If your outdoor space is mostly tarmac, use builders trays to make small world jungles; or make landscapes by filling tyres with compost and planting with grass and adding small world jungle animals. Provide additional resources such as a small plants and bark to add to the trays or tyres. Introduce positional terms like 'next to' and 'above' as well as suggesting they make an



The children will name **tigers**, lions, **monkeys** and bears, but don't forget other creatures such as **ants**, bees, **beetles** and butterflies, **crocodiles**, lizards, snakes and exotic birds like **parrots**

CAROLE SKINNER

audit of how many different animals 'live' in their jungle. Set clipboards and post-it notes alongside to support mark-making.

Arrange some play equipment in your outdoor jungle area into a challenging trail for the children to follow. Encourage them to use words such as 'over', 'under', 'up', 'down' and 'through' as they follow the trail. Include a play tunnel for the children to crawl through, and hide some soft toy bears or monkeys there for the children to find and count. Support the children to explore ways of negotiating their way round the different obstacles and encourage them to suggest ways in which the trail could be adapted. Summarise their ideas using positional words and help them to exchange commentary of how they followed the trail. You could use a plank across some crates to act as a bridge across the swamp. Don't forget that swamps contain crocodiles!



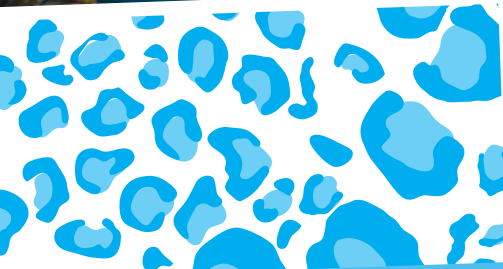
What else can you do?

Focus on calculation by discussing with the children what happens when you add one more to a collection of jungle animals. Line up five animals, count them together and then ask how many there'll be if you put one more tiger in the line. Add the tiger and count again. Discuss this with the children and model ideas – for example, "There were 10 animals and one went into the jungle to find a drink. I wonder how many would be left". Address ordinal numbers by asking children to arrange lines of jungle animals where the tiger is third in the line, where the lion is last, or where the monkey is first.

Collect together some props such as a soft toy tiger and tell a short story about a tiger getting lost in the jungle. Include descriptive language about shape and size, as well as positional words. The story might start, "One day the small tiger was walking in the jungle along a wide path, when he came to a tall tree. And at the very top was sitting a small monkey." Encourage children to make suggestions as to how the adventures should start and end, and what happens first and then second.

TIP: Children are intrigued by the names for groups of animals. Some favourites include a congregation of crocodiles; an ambush of tigers; a cartload of chimpanzees; and a memory of elephants.





TIP: Make jungle animal dice by putting a picture of a different jungle animal on each side of large cubes. Write down a list of the animals you have used on an easel. Take turns to throw the dice and make a paw print against that animal on the list. Whatever animal has the most prints after 10 throws is the winner.



Jungle animal capes available from Pretendtobee.co.uk

order; talking, singing, chanting, whispering and shouting number counts in the jungle area will all help children to learn to say them in the right order. Support children to explore the rhythm of counting by encouraging them to make large physical movements such as hopping or jumping along the jungle path.

- Introduce an animal puppet who finds it difficult to count. Ask the children to help you teach them the order of the numbers. Count to 10 several times, each time missing out one of the numbers.
- Show children how to make a crocodile puppet. Cut off the lid of an egg box and attach it to the short side of the box so that it opens like a mouth. Make eyes by gluing two extra egg cups to the lid and painting the whole thing green. Now ask the children to teach the crocodile to count.
- Develop children's sequencing and ordering skills by singing animal rhymes. Adapt the ones the children already know and sing together:

1, 2, 3, 4, 5, once I caught a snake alive;
6, 7, 8, 9, 10, then I let it go again.

Jungle counting

There are lots of counting activities you can initiate when children are playing in the jungle...

- It's almost impossible to count anything unless you know the number names in

Jungle books

A collection of storybooks featuring a variety of jungle animals is a valuable resource in any early years setting. Here are five must-have titles...

- *The Selfish Crocodile* by Faustib Charles and Michael Terry (Bloomsbury Children's Books)
- *Rumble in the Jungle* by Giles Andreae (Orchard Books)
- *Alligator Baby* by Robert Munsch (Cartwheel)
- *The tiger who came to tea* by Judith Kerr (Picture Lions)
- *The Cross-with-us-Rhinoceros* by John Bush and Paul Geraghty (Red Fox Picture Books)

Welcome to the Jungle

Encourage learning with these three resources...

MONKEY BUSINESS

Dressing up is easy with the Velcro-fastened Velour animal capes worn by the children on these pages. They are compliant with the EC Toy Directive and are available to nurseries for a 10% discount. Children will love choosing from the tiger, crocodile, monkey, elephant, cow, pig, chicken and fox. Visit pretendtobee.co.uk or call 0115 984 7838.

YES, WE DO HAVE BANANAS

One Banana, Two Banana is a fun counting game, suitable for four-year-olds and above – the first to reach the middle of the island, avoiding slippery bananas and swamps, is the winner! It encourages observation and strategic thinking, develops social communication, and is linked with the Early Learning Goals.

orchardtoys.com



DRESS TO IMPRESS

Charlie Crow has been supplying award-winning costumes that encourage sharing and imaginative play amongst children for more than 20 years. Discounts are available for nurseries and schools – visit the 'School Info' page at charliecrow.com for more information.

