Investigation and Exploration

Story Starters
10 favourite stories to support Investigation and Exploration:
1. The Very Hungry Caterpillar - Eric Carle.
2. Dig, dig digging - Margaret Mayo.
5. Walking through the Jungle. – Alison Bartlett.
7. The Pig in the Pond – Martin Waddell.
8. Oliver’s Vegetables. – Vivian French.
9. Handa’s Surprise. – Eileen Browne.
10. We’re going on a Bear Hunt-Rosen and Oxenbury.

An Oasis of Calm
We can’t really have an outdoor garden so we did the usual thing with grow-bags inside. However we wanted the children to use all their senses so we made an indoor sensory garden. We grew herbs, strongly scented flowers (hyacinths), made some gravel pathways, one of us had an indoor water fountain feature so we added that and then put in some fairy lights, a small bench and a blue drape for the sky. We also used a fan on a low breeze and a wind chime to give an added feel of tranquillity. Although this would have been great outdoors, it was the next best thing we could manage and it definitely added a calm and peaceful atmosphere to our room.

Messy Mixers
We always make our playdough with the children, sometimes they mix their own cornflower gloop – but what they all really enjoy is having a mixing bench! Various bowls, jugs, whisks, spoons, scales and sieves with dry ingredients such as flour (wholemeal or white), cornflower, any type of sugar, dried fruit, pasta, rice, smash etc... with water (warm and cold), and an adult to interact with. What they produce is disgusting but they learn so much whilst doing it that it’s worth all the mess! Luckily they also like the dust pan and brush at the end!

Outward Bounds
Going outside has made a huge impact on our children’s skills of investigation and exploration. The children complained that the carpet area was no good for weather discussions as they couldn’t see the weather and the weather changes throughout the morning. They asked if they could have the weather chart outside. We now have 2 charts, one outside and one inside next to the window so it can be changed as the weather changes during the session.

“Some opportunities for learning can only happen outside”.
(Marjorie Ouvry)

“Adult support to extend (young children’s) knowledge needs to work from the children’s current understanding”.
(Jenny Lindon)
Role Play Ideas:

- Lamp shop
- Lemonade factory
- Bakery
- Beehive
- Lighthouse
- Moonscape
- Bird-hide (outside)
- Builder’s yard
- Darkroom/Photography studio
- DIY shop
- Fitness gym/Health studio
- Nature sanctuary (outside)
- Pet shop
- Petrol station/car wash
- Spaceship/rocket
- TV studio
- Rabbit Warren

Leaf collection

When we collect leaves, at any time of the year, we always laminate a few. Children can use them to compare to other leaves as they grow, change colour or disintegrate.

Tinkling tree

To help understand wind movement we hang things on a tree outside. Most of these are noisy and some are made by the children. They vary in weight from muslin to metal. The stronger the wind the more movement and noise.

Level playing field

If you use different levels and sometimes ramps with small world play, it gives the children a new challenge and problems to solve. For example getting new furniture ‘up the hill’ to the dolls’ house.

Nature on display

Whenever we can, we include natural materials in our displays. This is great when various things change over the time they are on display.

Pulley

We rigged a simple pulley system over the outdoor area using rope and two opposite drain pipes to loop it around. The children loved it and spent ages regulating the pulley and transporting objects. We also used it for the lighthouse in ‘The Lighthouse Keeper’s Lunch’ role play.

Feely time

We use a feely box or bag everyday. We change the objects daily; sometimes it’s for a story sack or rhyme but mostly it’s a natural or unusual object linked to explorative and investigative skills. Children independently explore the box when they are ready; although placing it near the snack bar when there is an adult to interact with is handy.

Resource links:

Community Heritage Initiative, Tel: 0116 267 1377, email: chi@leics.gov.uk (Gives information and support regarding children’s involvement in local environmental projects).

Heritage Services, Tel: 0116 265 6781, email: museums@leics.gov.uk (Gives information regarding local interactive exhibitions and discovery based play in Leicestershire includes Charnwood Museum, Donington–le-Heath, Melton Carnegie Museum, Snibston Discovery Park).

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Party preparations

All you need to promote learning about changes in substances is jelly, chocolate, ice cream and the odd cake! This sounds to me like preparing for a birthday party, which is a really successful learning experience across all six areas of learning. Add in balloons and candles and they’re hooked!

Light on the subject

We have a box of bulbs, bulb holders, batteries and crocodile clips (all from ESPO) that the children delight in lighting up, especially as some of the kit doesn’t work and they sort it for us!

Tracking detectives

We have a huge muddy patch outside our setting. This causes great interest for various reasons. One of our favourite activities is following different tracks found in it from bird’s footprints and the Sunday footballers’ boot prints, to various children’s welly prints. Try planting some prints and see where the children take you.

Hedgehog Hotel

We noticed some hedgehog tracks outside so we decided to adopt it. We left cat food out for it and tried to catch its paw prints. It captured the children’s imagination and investigative skills. We finally managed to get some video footage of the hedgehog for the children to see.

Back to Nature

We have baskets of natural objects including pinecones, conkers etc... that we keep on display. The children use them for everything: in the role-play area, for construction, small world play etc..., or just to hold and love.

Treasure Trove

We play at treasure hunts using magnets and various objects. These can be placed in sand, water, sawdust, compost etc... This is helpful in introducing magnets although you could also try using a metal detector.

“Simply providing sand, climbing frame and a butterfly garden does not mean that children will learn about maths, movement or natural science”.

(Audrey Curtis)

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Treasure Box

A treasure or skills box is a collection of artefacts that stimulate discussion, enquiry, understanding, skills, knowledge for a particular area of learning, cluster or theme. Presentation is really important, as in a story sack, so children truly see the contents as treasures.

To start off an investigation and exploration box, the contents could be:

- torch, thermometer, coloured Perspex, foil, magnets, magnifying glass, plastic mirror, kaleidoscope, bulbs and holders, batteries, clockwork and battery driven toys, natural objects.