### . Spring Term 1

As Scientists we will explore and investigate a range of m different materials. We will look carefully at their properties and talk about why we use specific materials for a purpose. We will also become familiar with various occupations especially within the construction line of work and discuss, explore and investigate using a range of tools and how they work. We will also become familiar with various festivals e.g., Chinese New Year and Easter and look at how these festivals are celebrated around the world.

# **Development Matters content:**

**Understanding The World** 

#### Birth-3 Years: -

- Explore materials with different properties
- Explore natural materials, indoors and outside

### 3-4 Years: -

- Use all their senses in hands-on exploration of natural materials.
- Explore collections of materials with similar and/ or different properties.
- Talk about what they see, using a wide vocabulary
- Show interest in different occupations.
- Explore how things work
- Talk about the differences between materials and changes they notice.
- Continue developing positive attitudes about the differences between people. Know that there are different countries in the world and talk about the differences they have experienced or seen in photos.

# **Broader curriculum in preparation for Foundation Two**

During F1 we will be preparing to get ready for starting Reception / F2 and in doing so we will be: -

# Reception: -

- Begin to recognise that people have different beliefs and celebrate special times in different ways.
- Recognises some similarities and differences between life in this country and life in other countries.
- Enjoys exploring the natural world around them.

# **Spring Term 2**

As Scientists we will observe and look closely at plants and plant growth, we will be able to talk about what a plant needs to be able to grow and observe changes that take place over time, in relation to plant growth / a plants life cycle. We will also carry out our own simple investigations linked to plant growth and the basic structure of a plant. We will create our own garden centre / allotment in the classroom and hopefully visit our local garden centre or allotment site so that we can enjoy and experience opportunities to plant our own seeds and use gardening tools.

## **Development Matters content:**

**Understanding The World** 

Birth-3 Years: -

• Explore and respond to different natural phenomena in their setting and on trips.

### 3-4 Years: -

- Plant seeds and care for growing plants.
- Understand the key features of the life cycle of a plant and an animal.
- Begin to understand the need to respect and care for the natural environment and all living things.

# **Broader curriculum in preparation for Foundation Two**

During F1 we will be preparing to get ready for starting Reception / F2 and in doing so we will be: -

# Reception: -

- Exploring the natural world around them.
- Beginning to describe what the children can see, hear and feel whilst outside

### **Scientific Vocabulary**

### **Spring Term 1**

experiment investigate find-out explore guess predict ideas, investigation, materials, strong, weak. leavy. light, tools, properties

### **Spring Term 2**

experiment investigate find-out explore guess predict ideas, investigation, growth, short, tall, taller, shorter, measure, seed, shoot, flower, bud, roots.

# Exploration and Investigation through Play

Focussed Text: - 'The Big Yellow Digger'
Objectives:

### UTW

### Birth-3

- Explore materials with different properties
- Explore natural materials, indoors and outside

### 3-4 yrs

- Use all their senses in hands-on exploration of natural materials.
- Explore collections of materials with similar and / or different properties.
- Show interest in different occupations.
- Explore how things work

The children will be able to investigate and explore a range of materials through the enhanced and continuous provision - A construction / building site will be created for the children to

# <u>Celebrating Chinese New Year</u> Focussed Text: - 'Let's Build a

House'

Objectives: -

# UTW

### 3-4 yrs

- Continue developing positive attitudes about the differences between people.
- Know that there are different countries in the world and talk about the differences they have experienced or seen in photos.

# (Link to R.E session / PSED Chinese New Year)

Discuss similarities and differences between how we celebrate New Year and how Chinese New Year is celebrated around the world and in China. Talk about where China is in relation to England. Explore

# Spring Term 1 Building a Wall Investigation

Focussed Text: - 'Let's Build a House'

Objectives: -

## UTW Birth-3

- Explore materials with different properties
- Explore natural materials, indoors and outside

# 3-4 yrs

- Use all their senses in handson exploration of natural materials.
- Explore collections of materials with similar and / or different properties.
- Show interest in different occupations.
- Explore how things work

Investigation – Building a simple wall

# The Three Little Pigs Investigation Focussed Text: - The Three Little Pigs Objectives:

# UTW

# Birth-3

- Explore materials with different properties
- Explore natural materials, indoors and outside

### 3-4 yrs

- Use all their senses in hands-on exploration of natural materials.
- Explore collections of materials with similar and / or different properties.
- Show interest in different occupations.
- Explore how things work

Investigation – Can you Huff and Puff?

See sheet below – (Twinkl) Investigation

explore materials such as gravel, bricks, pebbles and other natural materials. A range of tools will also be available such as hammers, screwdrivers etc for the children to investigate how they work. Builder's clothing, safety equipment and other construction sets will also be available for the children to have opportunities to re-enact and take on roles such as construction workers / lorry drivers and other occupations linked to building work.

We will also talk about and re-create The Humber Bridge using a range of boxes, materials and tools. Discussing how the bridge is structured. We may also visit The Humber Bridge on a school trip.

cultural differences e.g., foods, traditions etc...

Allow the children to take part in tasting foods – Chinese foods e.g., Noodles, Rice, Stir Fry etc....

Provide role play resources / dressing up clothes in the home corner / provision. The children can also make simple cards / lanterns etc to participate in the traditional festivities.

Easter will also be another festival and celebration that we will discuss and talk about together throughout the term (Link to RE / PSED session)

Explain to the children that they are going to select and look at various materials to create a wall for Humpty Dumpty to sit on. The only problem is it needs to be a strong wall so that it doesn't fall down in the wind or rain.

Look at a range of materials e.g., straw, bricks, pebbles, paper, cotton wool etc... Which materials do the children think / predict will be the most suitable to use?

Allow the children to test out their own ideas and explore building a simple wall.

Once the children choose bricks – explain that we need to use cement to join the bricks together to help the brick wall stay up, otherwise it may fall over.

Show the children a selection of wet sand / dry sand – talk about and discuss which sand / cement would be best to use and why? Test using trowels and other tools in a tuff tray to see if the children are right with their predictions.



The children have to decide which objects they will be able to huff and puff using a foot pump or balloon pump.

Choose a selection of objects that weigh various amounts, The children will be able to predict which objects they may be able to 'huff and puff' away. The children will pretend to be the big bad wolf and group objects using a simple table system as to whether they can or can not blow them away?

Test predictions and investigate together. Discuss and talk about their findings and why this may be?

# **Spring Term 2**

# **Exploration and Investigation through Play**

# Focussed Text: - 'Titch' Objectives:

**UTW** 

### Birth-3 Years: -

• Explore and respond to different natural phenomena in their setting and on trips.

#### 3-4 Years: -

- Plant seeds and care for growing plants.
- Understand the key features of the life cycle of a

plant and an animal.

• Begin to understand the need to respect and care

for the natural environment and all living things.

The children will be able to investigate and explore a range of man-made and natural materials through the enhanced and continuous provision – We will create our own Garden Centre / Allotment role play area within the classroom. The children will have opportunities to explore compost, planting equipment and gardening tools. Resources such as plant, pots, seeds, bulbs, watering cans etc will be available for the children to explore planting and caring for plants, focussing on the various factors they need to be able to grow.

### **Growing a Beanstalk Investigation**

# Focussed Text: - Jasper's Beanstalk Objectives:

UTW

### Birth-3 Years: -

• Explore and respond to different natural phenomena in their setting and on trips.

### 3-4 Years: -

- Plant seeds and care for growing plants.
- Understand the key features of the life cycle of a plant and an animal.
- Begin to understand the need to respect and care for the natural environment and all living things.

Explain to the children that we are going to grow our own beanstalks like Jasper and Jack. Can the children think about some of the things we will ned to use? Discuss together using visual prompts.

Allow the children to watch you first demonstrate how to plant the seed properly and with care as a whole group activity. Can the children explain what we need to do first, next? Last and in

### **Trip to the local Garden Centre / Allotment**

Focussed Text: - 'Jack and the Jelly Beanstalk'
Objectives: -

UTW

### Birth-3 Years: -

• Explore and respond to different natural phenomena in their setting and on trips.

### 3-4 Years: -

- Plant seeds and care for growing plants.
- Understand the key features of the life cycle of a plant and an animal.
- Begin to understand the need to respect and care for the natural environment and all living things.

Organise a trip to a local garden centre / allotment for the children to see and learn how various plants grow. The children can ask questions and speak to local experts about plant growth and various fruits / vegetables that they may be growing. The children will also hopefully have opportunities to plant seeds and bulbs etc in a natural environment.

the correct sequence? Where would be a good place to put our seed? Why?

The children can then plant their own bean in a plastic sandwich bag and observe closely what happens over the course of a few weeks. Introduce class watering monitors and allocate responsibilities to children. Throughout the course of the investigation discuss and observe closely the changes that happen over time and introduce new vocabulary linked to plant growth and the various features of a plant. Whose beanstalk will grow the tallest? The children can predict and measure to check after the investigation is complete.