Subject……..Term……Spring ……

Topic……Science…….Lesson Length……

Wk	Learning Outcome	Lesson	Resources
1 5/1	To focus on observation and recording, throughout the whole topic. To learn that objects can be moved in a variety of ways.	Intro. the topic, "Toys", discuss all the different ways toys can move.(p1 of booklet).Explanation that these are all forces Pick out push and pull, (sheet), what toys can do this, examples, page in quarters draw and label.	Photocopies selection of toys.
2 10/1	To understand that springs store energy and after force is applied they return to their original shape. Appreciate top-heavy objects tip easily.	Squashing and stretching springs, experiment with springs, hanging weights on them. (record findings) Discuss and look as a class at different top heavy toys.	Springs and weights. Toys
3 17/1	To learn that moving air pushes against surfaces.	Sailing (toy boats) – make boats in groups test and record which was the best boat, and why. Blow this – sheet related to the wind rein force outcome.	Equipment for boats and sheets.
4 24/1	To understand that objects sink if they are denser than water. Forces can cause movements (gravity pulls things down.	Floating – chose a selection of objects guess if they will sink or float, (carry out exp. as a class) and record results. I'm not touching this – discussion on toys that move with out touching them, carry out sheet.	Floating objects Sheets
5 31/1	To grasp that different balls have different elasticity and to learn things fall through the air at different speeds.	Bouncing - exp. on balls, dropping them from the same height. See sheet. Spinners – Make different sized spinners and discuss the best.	Balls Paper
6 7/2	To start to understand that once moving things tend to go on moving unless friction opposes it	Slides – exp. to show which toy slides the best, record. Move along – draw the toys that rolled down the slope the best.	Slope (lit board) toys
7 14/2	To understand things needs energy to work. Re-inforce all the forces covered, pushing etc.	How toys work – Draw and label how other toys work, batteries, springs & elastic. Evaluation (game)	Examples of toys Copies of game and plasticine.

8 28/2	Introduction to changes materials in action. This half term is all related to prediction. To understand what a fair test is.	Intro. to the topic, sheet related to this, what happens to different materials when they are heated. Carry out experiment related to the topic with different materials, draw the changes. See sheet.	Different materials choc, ice etc.
9 6/3	To describe different material and predicted their changes. To understand the importance of a fair test.	Sheet 1a, sort objects into groups, as a class using a Venn diagram. Sheets 2a, experiment to find the stretchiest material, predicted before and then write up results.	Hoops variety of objects.
10 13/3	To classify different materials in a chart. To record your results correctly, of the experiment.	Shaping up Sheet 1b, try changing the shape of different objects, classify them in a chart. Stretch and measure various materials and put into a chart.	Variety of objects to be felt.
11 20/3	Children will develop an understanding of absorbency.	Rainbow soaks – discussion, of which paper they think will absorb the most fluid, (write down). Experiment 5a. Make a sunburst – experiment 5b, record which colours make the largest sunbursts.	Different paper, food colouring.
12 27/3	Assessment of the topic to go in yellow folders. Related to changes in materials	See photocopy sheet.	
13 3/4	Children will develop an understanding of waterproofing.	Keeping dry, discuss which materials they think will be the best for a raincoat and why draw their own and label. Every drop counts (6b), experiment to see which material keeps the person the driest.	Pots material and pipettes.