Plan for Focused Assessment of Science

Topic: Forces	Year 3 Age 7-8	Title: Balloon Rockets

Working Scientifically **Review:** Using results to draw simple conclusions, suggest improvements and raise further questions.	**Conceptual Knowledge Context** Compare how things move on different surfaces.

Assessment Focus
- Can children use results to predict and explain what may happen on the next attempt?
- Can children suggest improvements?

Activity
Set up a balloon rocket with the children (inflated balloon taped to straw, string through the straw, let go of balloon to shoot along string). Ask them to discuss what they think will happen if different tracks of different materials are used e.g. wool, garden string, plastic coated wire, etc.
In groups or as a class, test out different tracks. Each time predict the distance the rocket will go, applying knowledge of friction and previous runs.
Children could record predictions and results OR suggestions of improvements to the method after the investigation.
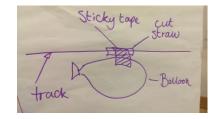
Adapting the activity
Support: Pre-prepared chart for recording predictions and measurements
Extension: Extra column to note explanations for results

Key Questions
- What do you think will happen when we let go of the balloon?
- Do you think it will be different if we use different tracks? Why?
- How far do you think it will go on this track? Why?
- Which balloon went furthest?
- Why did that balloon go further/not as far?
- Which track do you think was the best?
- How accurate/fair do you think our results are?
- What could we do to be more accurate/fair?

Assessment Indicators

Not yet met: Describes differences between different balloon tracks.

Meeting: Explanations of results use comparisons to previous results to make further predictions and suggest improvements for investigation set up, *e.g. need a longer track, we didn't use the same balloon.*

Exceeding: Suggests improvements with reasons, *e.g. it's not fair because we used different balloons, the balloon could have gone further if the track was longer so we need to do it again.*