

# Crosshall Junior School



Whole school assessment



# Summary of Content

This school has an extremely robust system of assessing pupils to aid progress.

They do not rely on one single method, but combine information collected in a variety of ways to give them a comprehensive overall picture of scientific knowledge and skills for each child.

We believe this model can easily be adapted to the new Curriculum 2014



# What the school says

Science is such a practical subject and we wanted to introduce the pre/post assessment so that progress could be evident in books. Teachers now give children a pre-assessment and two-thirds assessment so they can adjust the teaching and learning for their class as necessary.

Target cards also get children to self assess and think about their own knowledge and SC1 skills.

# Extract from Science Statement of Practice.



## Assessment

- ✓ Teachers must assess pupils prior to the teaching of a topic and again at two-thirds during the topic. Time must be allowed at the end of the topic to discuss misconceptions.
- ✓ Results of these assessments must be recorded and kept for the academic year.
- ✓ Planning must be amended in light of these assessments to reflect what children already know
- ✓ SC1 core skills must be assessed and recorded (SC1 skills grid). These will then be shared with the next year group at the end of the academic year.
- ✓ Formative Assessment strategies must be in place to support lessons and given children ownership of their learning.
- ✓ GOAL must be used to support teacher assessment of children (40% SC1, 20% SC2, 20% SC3 and 20% SC4)

**IMPACT** - All staff are clear on the expectations for assessment.

# An example of a Lower School pre and post assessment.

1. Write the names of any teeth you know.
2. What can you do to look after your teeth?
3. What three jobs do our teeth do?
4. What foods or drinks can damage your teeth?
5. Label the foods on this plate.  
If you can label the food group too please do.

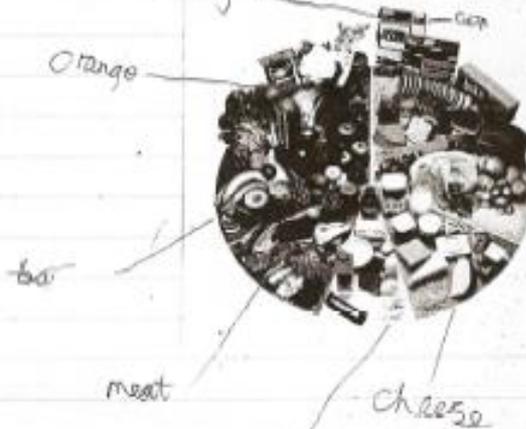
**IMPACT**

Children are challenged and support in appropriate ways. Teacher's know what their children already know so learning time isn't wasted. Clear progress evident for each unit of work.

Wednesday 12<sup>th</sup> September

Quiz 1

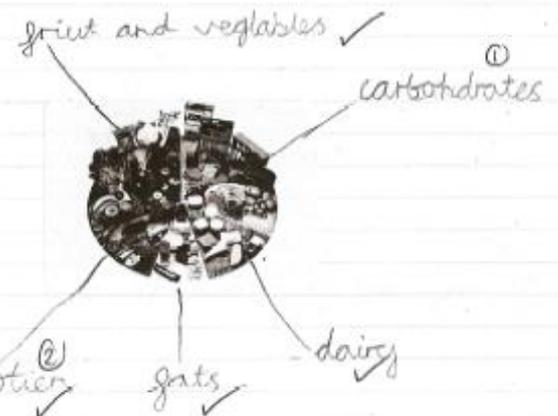
- 1) Wisdom teeth ✓
- 2) Brush teeth eat healthy food
- 3) They chew your food instead such
- 4) Some fizzy drinks food with sugar cornflakes
- 5)



Wednesday 17<sup>th</sup> October

Final Quiz

- 1) canines, incisors, molar, wisdom ✓
- 2) brush teeth twice a day for two minutes with tooth paste and floss ✓
- 3) chew, tear and cut ✓
- 4) ~~ice~~ coke, sweets, sprite, chocolate ✓
- 5)



# An example of an Upper School pre and post assessment.

IMPACT

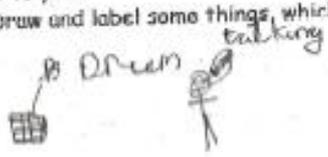
Teacher's find out what their children already know, so learning can be targeted.  
 Children are challenged and supported in relevant ways.  
 Progress is clearly evident for each unit of work.

William Wood

Science Pre-Assessment  
Sound-Year Five

Answer the following questions. Use as much detail as possible in your answers. If you are unsure of what the question means ask an adult to read it to you.

Draw and label some things which can make sound.

 Drum talking

How are sounds made?  
 If you bang a ~~class~~ drum it makes a sound.

How does sound travel?  
 The ~~new~~ wind blows it around.

Draw a picture of how sound travels.

 wind

Can sounds travel through solids? No  
 Can sounds travel through liquids? No  
 Can sounds travel through gases? yes

The word muffle means to make a sound quieter. Finish the prediction below. You need to choose a material, which you think will muffle sound well.

I predict that a solid will muffle a sound really well because the sound can't go through solids.

Mid Topic Assessment

1. Draw and label some things that make sound.  
 drum trumpet

2. How are sounds made?  
 The vibration.

3. How does sound travel? Explain your thoughts and draw a picture.  
 It vibrates out to your ear which make a sound.

 car

4. Can sound travel through solids? No  
 5. Can sound travel through liquids? yes  
 6. Can sound travel through gases? yes

7. The word muffle means to make a sound quieter. Write down a material you think would muffle a sound well and explain why you chose it.  
 sword because it's a solid.

8. What does pitch mean?  
 If it's high sound or a low sound.

9. How can the pitch of an instrument be changed?  
 Ruler! If it's loud and if it's quiet.  
 different notes

10. What does volume mean?  
 10

11. How can the volume of a drum be changed?  
 Hit it harder.

# Different assessment strategies are used consistently in science lessons across the school.

**GOAL Online** was recently introduced which provides teachers with some information about the children's **scientific knowledge**. We now use this at the beginning and end of each year to monitor progress and identify gaps in learning. Some areas of SC1 are addressed in this but mostly teachers monitor SC1 in practical science lessons.

**IMPACT** Gaps in learning can be identified  
Clear evidence of progress

Teacher	Type	Number	Class	Assmnt Date	Subject
Nathan Clark	NCPT	1147932I	4NC	02/10/2012	Science
Liam Murphy	NCPT	1148100I	LM	02/10/2012	Science
Becky Harrison	NCFL	1148409I	5BH	03/10/2012	English
Becky Harrison	NCFL	1148410I	5BH	03/10/2012	Mathematics
Angela Connor	NCPT	1148458I	4AC	04/10/2012	Science
Jill Reedman	NCPT	1149173I	5JR	08/10/2012	Science
Judith McAteer	NCPT	1149905I	JM	10/10/2012	Science
Becky Harrison	NCPT	1150410I	5BH	11/10/2012	Science
Chris Dorey	NCPT	1150461I	3CD	11/10/2012	Science
Ann Wilkinson	NCPT	1150511I	4AW	12/10/2012	Science

Assmnt Levels	Assmnt Scores	Goal Score	Previous NC Level	Current NC Level	Target NC Level	Points Score
W:W:1	10:08:07	NA:16:23	N/A	1B	2C	NA:09:13
W:1:2	09:07:08	NA:25:32	N/A	2B	3C	NA:15:19
W:1:2	09:09:06	NA:25:32	N/A	2B	3C	NA:15:19
W:W:1	06:06:05	NA:10:17	N/A	WA	1B	NA:05:09
W:W:1	10:09:10	NA:20:26	N/A	1A	2B	NA:11:15
1:2:3	08:06:03	NA:25:32	N/A	2B	3C	NA:15:19
1:2:3	07:04:02	NA:18:25	N/A	1A	2B	NA:11:15

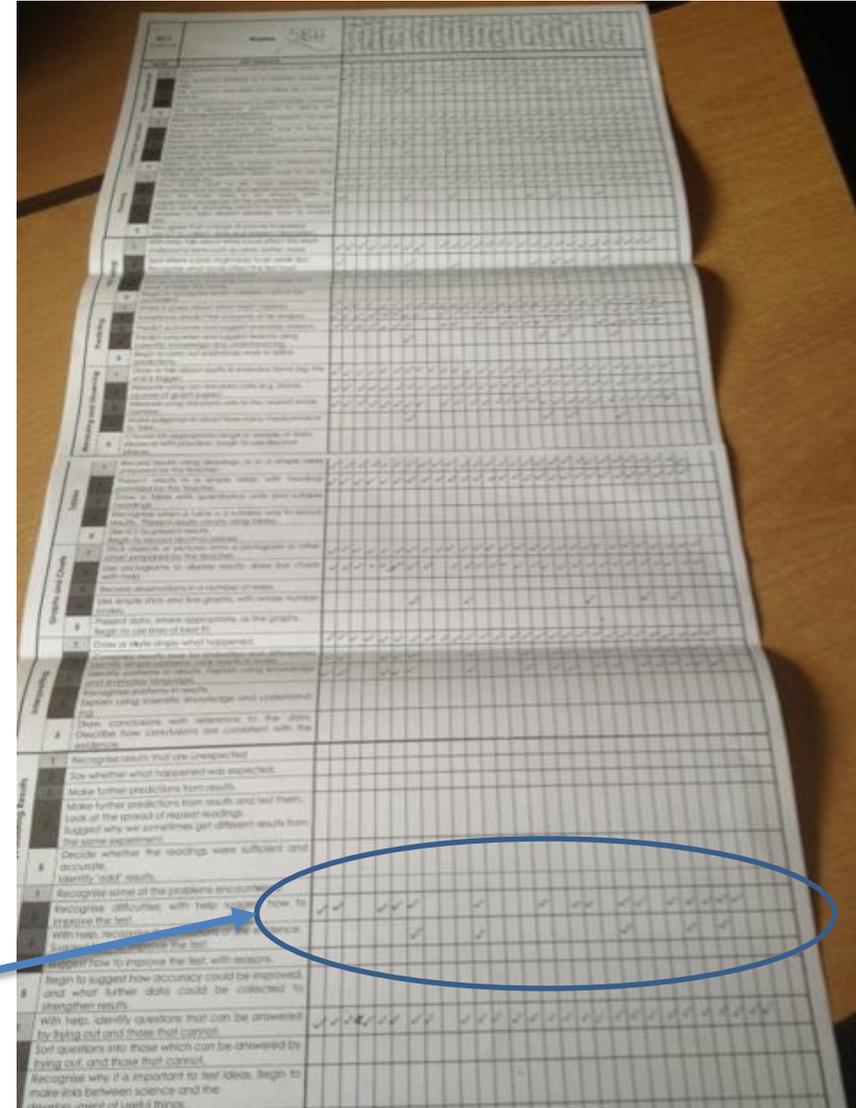
Teacher's can set questions and analyse the data.

# The SC1 skills grid - which is passed on to the next class teacher.

Sc1 skills (currently based on APP but could be adapted to working scientifically)

Children in class

SC1 Science		Name																														
Level		APP Statement																														
Ideas and questions	1	Ask questions using a narrow range of stems - How? Why?	Ella	Benjamin B	James	Harvey C	Chloe	Sophia	Samuel E	Haydn	Emma F	Reggie	Harvey G	Sam G	Jason	Archie	Megan	Ben	Edward	Eve	Erinn	Sophie	Joshua	Darcie	Emma S	Sadie	Richie	Rory	Oliver	Neve		
	2	Ask questions leading to a scientific enquiry with help.																														
	3	Ask questions and offer own ideas for a scientific enquiry.																														
	4	Ask questions which have a clear scientific purpose. Use an appropriate approach to asking and answering scientific questions.																														
	5	Respond to observed features of objects - my dad's car goes faster than this toy one																														
Choosing an approach	1	Respond to suggestions about how to find out. Begin to make own suggestions.																														
	2	Respond to suggestions and put forward own ideas. Use simple texts to find information.																														
	3	Decide on an appropriate approach to answering a scientific question.																														
	4	Select from a range of sources of information to identify an appropriate approach.																														
	5	Make simple suggestions about what to do and what to look for.																														
Planning	1	Plan simply what to do, what observations or measurements to take. Recognise some hazards.																														
	2	Plan the main steps in an enquiry, refer to equipment, recognise all the main hazards.																														
	3	Plan in detail, including what to measure or observe whether to take repeat readings, how to control risks.																														
	4	Recognise that a range of sources is needed. Use ICT to collect, store and present information.																														
	5																															



## IMPACT

- Clear evidence of progress.
- Gaps in learning can be identified.

# Real life science used for assessment

As a mid-topic assessment in changing sounds, we used [Evelyn Glennie](#). The children needed to explain how, as a deaf percussionist, she could “feel” the music as she played and experienced others playing.

This helped to assess the children’s understanding of sounds being made by vibrations.

# An example of a Lower School and Upper School target card.

Children are given a **Target Card** which shows a clear **Learning Journey** for each topic They **self assess** at the beginning and end of each topic.

**IMPACT** Children are challenged and supported in relevant ways.  
Children are encouraged to take ownership of their learning.

## Lower School

Spring 2013

Science Topic: Magnets and Springs

### Real Life Purpose

To use your knowledge of magnets and springs to:

- make a fishing game for younger children

Can I meet the target already?	Targets	Can I meet the target now?
☹️ 😐 😊	I can draw a magnet.	☹️ 😐 😊 ★
☹️ 😐 😊	I can draw a spring.	☹️ 😐 😊 ★
☹️ 😐 😊	I know what the two ends of a magnet are called.	☹️ 😐 😊 ★
☹️ 😐 😊	I know what magnets can be used for.	☹️ 😐 😊 ★
☹️ 😐 😊	I know what springs can be used for.	☹️ 😐 😊 ★
☹️ 😐 😊	I can explain how a spring works.	☹️ 😐 😊 ★
☹️ 😐 😊	I can say what to change and keep the same in an investigation.	☹️ 😐 😊 ★
☹️ 😐 😊	I can write a conclusion, comparing my results.	☹️ 😐 😊 ★
☹️ 😐 😊	I know how to record results.	☹️ 😐 😊 ★

## Upper School

### Our Learning Journey

Aim: I can help the medical profession by developing ideal conditions for the growth of antibiotics.

Pre-assessment	Learning Intentions	Post-assessment
☹️ 😐	I know the seven life processes common to all living things.	☹️ 😐 ✓
☹️ 😐	I can explain what a micro-organism is.	☹️ 😐 ✓
☹️ 😐	I know the conditions that micro-organisms prefer to live and grow in.	☹️ 😐 ✓
☹️ 😐	I can name at least three different ways that micro-organisms can be helpful.	☹️ 😐 ✓
☹️ 😐	I can name at least three different ways that micro-organisms can be harmful.	☹️ 😐 ✓
☹️ 😐	I can explain how to prevent the spread of harmful micro-organisms.	☹️ 😐 ✓
☹️ 😐	I know the conditions in which a micro-organism produces the most gas.	☹️ 😐 —
☹️ 😐	I can name some scientists who investigated micro-organisms and explain what they discovered.	☹️ 😐 ✓

Transfer form      Year of Intake: 2012



Name			
DOB		CF	
Y2 CT		IEP	
Y3 CT		Statement	
Y4 CT		Pupil Premium	
Y5 CT		Vital Few	

Present Group / Set Information					
	Y2 Book Band	AR Level	Writing	Maths	Science
Y2					
Y3					
Y4					
Y5					

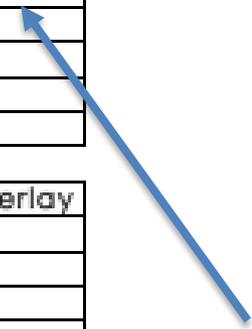
Other Intervention/Extension/G&T		Overlay
Y2		
Y3		
Y4		
Y5		
Y6		

	Excellent	Very Good	Average	Below Av.	Poor
Attitude to Work					
Organisation					
Homework					
Parental Support					
Behaviour					

Attendance Issues	
Not Punctual	Attendance (under 95%)

Medical Information			
Asthma	Allergies	Epilepsy	
Hearing Problems	Visual Problems	Other	
Dyslexic Tendencies	Dyspraxic Tendencies		

Honour Awards	Future Me Awards



The Transfer Form now includes science, so it can be discussed at transfer meetings.



# The impact for our school was .....

We know where are children are and what they need to learn next. So do they.

The SC1 tracking sheet allows teachers to know what concepts have been covered and identifies skills that need to be taught.

Now science is on the transfer sheet we can pass on information about Science knowledge, Understanding and skills to the child's next class teacher.

# Science Subject Leaders Comments

We are proud that we have been praised for our Science assessment, especially noting

“pupils work readily with a partner or in groups where they are very clear about what they are learning, and routinely assess their own or their classmates’ progress against a personal ‘learning journey’ in lessons. This helps them to judge how well they are doing in comparison with the objectives of the module of work.”



# What we will do next

Our next steps are to look at assessment and the new curriculum and how we can adjust the good practice that we currently do.