



St Richard Gwyn Catholic High School

Numeracy Policy

Approved by Governors on _____

Signed _____ *(Chair)*



POLICY AIMS

At St Richard Gwyn, our aims are to:

- develop and improve numeracy standards across school, enhancing pupil skills in numerical reasoning, using number, measuring and data skills;
- allow learners to transfer skills, information and understanding across all areas of the curriculum;
- make all staff aware of their responsibilities and contributions towards enhancing pupils' numeracy skills, taking accountability for the development and implementation of the National Literacy and Numeracy Framework (LNF) through inclusion in schemes of work and lesson plans;
- support and encourage learners in their confidence and use of numeracy;
- support assessment, recording and reporting procedures;
- ensure equality of treatment and opportunity regardless of gender and ethnic background.

DEFINITION OF NUMERACY

Numeracy is an essential life skill that learners need to be able to apply across the curriculum in different subject areas and in real life contexts. Mathematics is a part of numeracy, but to be numerate means you are able to apply some of these mathematical skills in many more contexts than in mathematics lessons and across several subject areas.

To help distinguish between numeracy and mathematics, numeracy is defined as:

“Identifying and applying numerical reasoning skills in order to solve a problem, and carrying out the numerical procedures which enable people to work out and show their solutions”

(Literacy & Numeracy Framework – Welsh Government, September 2012)

EQUAL OPPORTUNITIES

Numeracy is an outcome of the programmes of study and is therefore a right for all pupils, not a privilege for some. Within school, pupils have the entitlement to a numeracy rich environment regardless of perceived ability. Pupils' self-confidence and beliefs in both themselves and mathematics need to be high to enable progression and utilise success.



As a school, we are committed to improving standards in Numeracy with all teachers sharing responsibility for its development. Those involved in teaching Mathematics lay the groundwork. From this, other learning areas build on the work undertaken, providing rich opportunities that offer challenge and the consolidation of pupils' skills and knowledge base. The provision of high quality numeracy tasks is to be referenced in schemes of work across all faculty areas.

1. THE LITERACY & NUMERACY FRAMEWORK

The LNF is to be fully integrated across 5 subject areas initially, with Numeracy strands of the LNF mapped centrally. Teachers in every subject should use a range of tasks and contexts appropriate to their subject, offering learners a way to develop their numeracy skills in a meaningful way.

All teachers, either as a Learning Coach or subject teacher, are responsible for developing and evaluating the numeracy skills of our pupils in accordance with school procedures. Learners are expected to adjust and extend their numeracy skills across subject areas. Consistency in teaching approaches is important to enable learners to develop and adapt strategies when dealing with different contexts.

The Numeracy element of the Literacy and Numeracy Framework is divided into two sections:

a) Procedural

Within the numeracy component of the LNF, "Procedural Skills" are broken down into three strands.

- i. Using number skills – the fundamental skills needed to be comfortable with using and manipulating numbers when carrying out procedures i.e. Fractions, decimals, percentages; Ratio; Estimation; Managing money.
- ii. Using measuring skills – knowing what measurements to use in which context, what standard units to use and to what precision i.e. Measures; Time; Temperature; Area and volume; Angles and position.
- iii. Using data skills – representing the results of tackling a problem that involves handling data in several ways i.e. Collecting and recording data; Presenting and analysing data; Interpreting results.

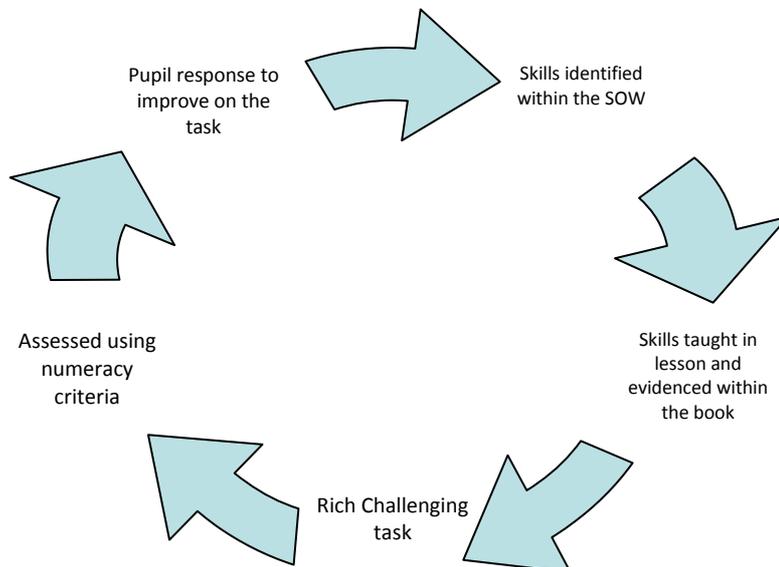
b) Reasoning

Developing numerical reasoning skills in the LNF reflects all of these skills in the process of applying and using procedural (mathematical) skills in a variety of contexts.

2. A CROSS CURRICULUM APPROACH

Numeracy is to be delivered across all curriculum areas, providing the opportunities for the application of knowledge, skills and understanding, essential for personal and social development and supporting the life-long learning of its pupils. It should not be ‘bolted on’ in lessons, but delivered where meaningful and appropriate opportunities exist.

Subjects are to identify key tasks within their key stage 3 schemes of work in which they can confidently deliver the identified numeracy skills, assess these skills and report on them. Subjects may wish to complete one task per half term but there is no requirement to do this. The focus should be on the quality of the task rather than the quantity. In each task, staff should ensure that they are teaching the specific numeracy skills identified using the Numeracy Framework prior to the assessed task taking place. On completion of the task, feedback should outline pupil achievement and areas for development.



“Numeracy, including arithmetical and data-handling skills, is deployed widely across the curriculum, and competence in numeracy is essential for independent living and work. Students need regular opportunities to deepen their understanding of number and, as with literacy, to reinforce and use their numeracy skills in different contexts. It is important that all teachers and other staff who work with children and young people have an understanding of how best to reinforce these skills and take opportunities to consolidate learning appropriately. The numeracy component of the LNF provides guidance about a common approach to the reinforcement of such skills at different developmental stages.”

Professor Donaldson, Successful Futures Report (Feb 2015), a curriculum review of Welsh education



3. MARKING

Marking pupils' written work is an important part of teacher assessment.

Effective marking for numeracy can:

- provide clear feedback to pupils about their strengths and weaknesses in their use of numeracy;
- recognise, encourage and reward student's effort and progression;
- motivate pupils to communicate their subject knowledge and understanding effectively;
- monitor pupil progress in the use of numeracy;
- provide feedback on numeracy teaching and those areas of numeracy where groups and individual students need specific help

When marking pupil's numeracy work across the curriculum, as well as assessed numeracy tasks specified in schemes of work, teachers should:

- mark both for subject content and for numeracy
- make reference to the specific numeracy skills being assessed
- identify the strengths and areas for development in the pupils' numeracy skills and how to improve in the future
- use icons to ensure consistency across school

M	W	N	U
You have made an error in your method	Always show your workings out	Number Error: Check your calculations again	You have made a Units error or omission

Work across all key stages should include reference to these codes in both teacher and peer assessment tasks. This, together with the assessment guidelines stated, will be a focus for work scrutiny.

4. REPORTING

The school reports on the progress of Numeracy for all KS3 pupils. Each subject comments on either literacy or numeracy for their subject and the progress the pupil has made. The school is looking to develop the reporting for numeracy, ready to implement in the academic year 2017-18.

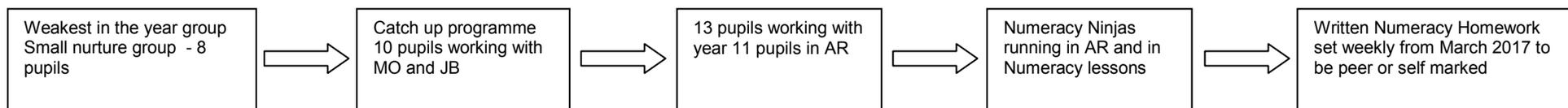


5 NUMERACY INTERVENTION

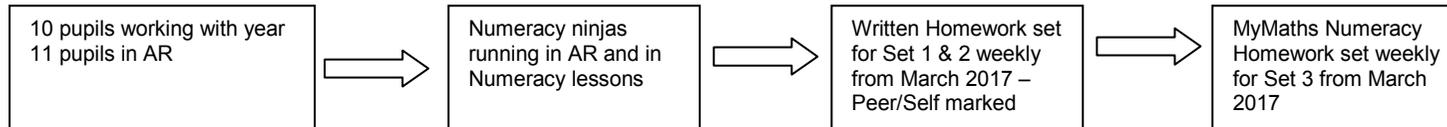
Intervention programmes for Key Stage 3 learners who experience difficulties with numeracy/mathematics are tailored to meet individual learners' needs. Please see below diagram for the plan for each year group.

KS3 Intervention and Support

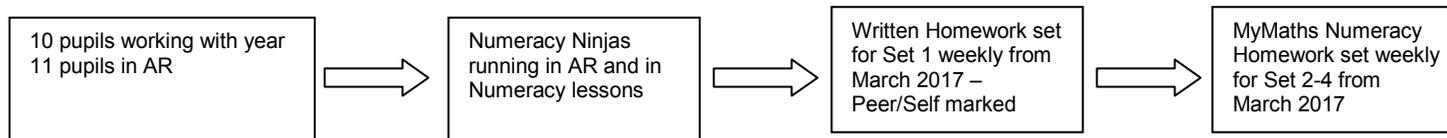
YEAR 7



YEAR 8



YEAR 9





5. ROLE OF THE SENIOR LEADERSHIP TEAM

- Participate in the planning, implementation and evaluation of framework;
- Determine the role of the Numeracy Co-ordinators;
- Specify expectations to be made of all teachers;
- Support the development and implementation of a numeracy policy;
- Provide CPD opportunities for teacher in the school;
- Provide opportunities for effective communication between the Numeracy Co-ordinators, the Senior Leadership Team and all teaching and support staff;
- Produce a budget for Numeracy development.

6. ROLE OF THE NUMERACY CO-ORDINATOR

- Integrate numeracy teaching in line with the National Literacy and Numeracy Framework, enhancing the numeracy policy in school;
- Audit the delivery of numeracy across Years 7, 8 and 9;
- Liaising with HoD's and subject teachers/KS3 co-ordinators to ensure a consistent approach and to identify areas to address across school
- Develop numeracy activities during registration time on a weekly basis.
- Utilise school data effectively identifying learners with numeracy difficulties using the waves of intervention model. Coordinating interventions i.e. Catch up support programme, linking with the Maths Department, organising Year 11/12 mentor programme with KS3 pupils.
- Analysis of the Numeracy procedural Test data to identify key topics pupils have difficulty with, liaising with the Maths Department for appropriate interventions here
- Analysis of Intervention programs to ensure smooth running and that pupils are making progress
- To meet with the line manager, giving updates on current and future developments.
- To liaise with Flintshire schools coordinators and the GWE Challenge advisor.
- Attend Numeracy training events to develop Numeracy in SRG.
- To advance teaching practice in numeracy across all curriculum areas by co-ordinating and delivering training sessions of staff through Staff Training Days providing support materials where possible.
- Be aware of current ESTYN inspection models and search out good practice both locally and nationally



7. EVALUATION

The whole-school numeracy policy will be monitored and reviewed through:

- reviews by SLT and the Numeracy Co-ordinator
- SER and DIP
- lesson observations and work scrutiny;
- pupils' work portfolios;
- discussion with pupils, staff and parents;
- analysing assessment data.

Through this evaluation process of monitoring and reviewing the implementation of the numeracy policy across school, this will inform decision making about improvements and further developments.

Review

This policy will be reviewed annually.

Rev.No	Date	Authorised By	Details of Revision
V1	July 2017	Governing Body	New Policy