

# Benfield School Curriculum Area Improvement Plan 2019-2020



## Benfield School Curriculum Area Action Plan

Curriculum Area: **Numeracy**

Period of action: September 2019 – July 2020

Created 9<sup>th</sup> September 2019

Area Focus and Key Outcomes	2019 - 2020
<b>Quality of Education</b>	<ul style="list-style-type: none"> <li>• Embed numeracy key skills with lower ability students</li> <li>• Extend numeracy skills for more able students</li> <li>• Ensure numeracy is delivered consistently across all curriculum areas and is evident in SOW</li> <li>• Morning registration content</li> </ul>
<b>Behaviour &amp; Attitudes</b>	<ul style="list-style-type: none"> <li>• Numeracy based work completion in detentions</li> <li>• Increase enjoyment and engagement with Numeracy across the school</li> </ul>
<b>Personal Development</b>	<ul style="list-style-type: none"> <li>• Problem solving skills/raise aspirations</li> <li>• Guest speakers/Wonder wall to increase promotion of numeracy amongst students</li> <li>• Visits to Newcastle University to promote and raise aspiration</li> <li>• Numeracy CEIAG pathways</li> </ul>
<b>Leadership &amp; Management</b>	<ul style="list-style-type: none"> <li>• Increase numeracy profile across the school - posters</li> <li>• Numeracy CPD</li> <li>• Headteacher Blog content to emphasise and promote numeracy</li> <li>• Strengthen parental engagement</li> <li>• Links with feeder primary schools</li> </ul>

### Quality of Education

#### 1. Embed numeracy key skills with lower ability students

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
TTRS during tutor time	Students with tutor guidance	Tutor time	£113.88 for annual subscription to TTRS	Usage monitored through the app by DF	Usage stats on TTRS website	Increased usage of the site outside of maths time and engagement in healthy competition through the site
Consolidation of basic skills	Maths Dept	Ongoing	Cost of printing £500	Weekly basic skills lessons in Maths bespoke to each class and individual pupils	Shown in books and planning	Greater knowledge of basic numeracy skills as shown in maths lessons and elsewhere

## 2. Extend numeracy skills for more able students

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Entry to the UKMT maths challenge	Maths Dept	Feb and April 2020	£156 for papers	One maths lesson taken to complete test  Optional preparatory session run in school by DF	Student voice Published results	Engagement of the students with the problem solving aspect of the UKMT maths challenge and hopefully success
Visits to Newcastle University	Maths Dept	November 2019	Travel costs School has annual Metro pass	University visit to highlight the possible careers in Maths and Physics at Newcastle University	Student voice	Raising of aspirations to attend University to study STEM subjects

## 3. Ensure numeracy is delivered consistently across all curriculum areas and is evident in SOW

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
CPD to engage all staff in numeracy	DF	Ongoing	Time to plan and attend CPD and funding for guest speakers	Whole school CPD to suggest possible areas where numeracy can be embedded in all areas of the curriculum  Learning walks to assess impact with results shared with staff and on shared area	Learning walks CPD feedback (Survey)  Work scrutiny	Increased and correct use of numeracy skills evident in work scrutiny/observations/learning walks
Produce a whole school numeracy document	DF	November 2019		Document available on the shared area with suggestions for embedding numeracy in all subject areas	Document available in shared area	Evidence that strategies are being used in all curriculum areas through work scrutiny and learning walks

## 4. Morning registration content

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Numeracy content as part of the Tutor time activities	Tutors	Ongoing	Printing costs £550	DF to produce numeracy activities to be shown during tutor time on a weekly rota with PSHE and Literacy activities	Tutor feedback  Student voice	Greater engagement and curiosity about maths and problem solving

## Behaviour & Attitudes

### 1. Numeracy based work completion in detentions

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Provide a pack of KS3 and KS4 numeracy work to be completed during detention	DF	On-going	Printing costs £150	Make good use of detention time by completing numeracy work	Teacher feedback	Students developing their numeracy skills

### 2. Increase enjoyment and engagement with Numeracy across the school

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Times Tables Rock Stars	Tutors	On-going	Subscription fee £94.90 School plan per year	Times tables app which can be used to make learning times tables fun and create a culture of competition through the battle version of the app	Student voice	A rise in the standard of basic numeracy in the school as evidenced in maths lessons and other lessons
Maths Week	Maths Dept	March 2020	Guest speakers Resources	Introduce students to many different aspects of maths in a fun and interactive way with a week of in school activities to raise the profile and engagement of students with maths/numeracy	Student voice Teacher feedback	Greater student engagement and enjoyment of maths during this week and beyond
Pi Day	Maths Dept	March 2020	Staff cover £TBC	A fun day designed to get all students thinking about and partaking in numeracy related activities centred around the number Pi	Student voice	Student engagement and curiosity about Pi and enjoyment of the day's activities

## Personal Development

### 1. Problem solving skills/raise aspirations

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Problem solve activities	DF	On-going	Printing costs £200	Problem solving activities to be completed in Tutor time	Teacher feedback  Student voice	Students enjoy and partake in problem solving activities and develop resilience in the face of problems
Aspirational presentations	DF	On-going	Speaker fees £Tbc	Presentations to be shown in Tutor time of people who have numeracy/maths related careers to inspire pupils to think about a career in that field	Teacher feedback  Student voice	More students become interested in a career or further education in a mathematical field

### 2. Guest speakers/Wonder Wall

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Guest speakers	DF to organise	On-going	£TBC	Guest speakers to come into school to talk about different aspects of numeracy (real life financial maths and further education in maths)	Student voice	Students to have a better grasp of financial maths  Students to aspire to pursue a career in a mathematical field
Wonder Wall	DF	On-going	Printing costs £200	Produce a wonder wall of past pupils of Benfield who have gone on to have a successful career in their respective fields	Student voice	Students have higher aspirations for what they can achieve after leaving Benfield

### 3. Visits to Newcastle University

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Year 10 conference	Maths Dept	November 2019	Travel costs £Tbc	Year 10 conference to encourage students to continue studying maths at A-level	Student voice Teacher feedback	More students are encouraged to take maths to A-Level and pursue a mathematical career
Year 9 & 10 WISDOM: Women in Science Doing Outstanding Maths	Maths Dept	June 2020	Travel costs £Tbc	Year 9 and 10 conference specifically designed to encourage young women to get involved in mathematical and physics careers	Student voice	Greater interest from girls in school to get involved in mathematical careers and further education in maths/physics

### 4. Numeracy CEIAG pathways

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Guest speakers	DF to organise	Ongoing	TBC	DF to organise guest speakers to talk to students about numeracy beyond school (Real Life financial Mathematics)  Guest speakers to talk about possible career paths in numerical/mathematical fields	Student voice	More students feel prepared for the numeracy demands of life after school  More students become interested in mathematical careers
Newcastle University visits	Maths Dept	November 2019	Travel costs	Students to visit Newcastle University for a conference careers/further education in mathematical/physics fields	Teacher feedback Student voice	More students are interested in pursuing a career in mathematical/physics fields

### **Leadership & Management**

#### 1. Increase numeracy profile across the school

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Source posters of famous people with mathematics/numeracy degrees or higher qualifications	DF	October 2019	Printing costs	Put up posters around school to inspire students to look towards a higher qualification in maths	School tour	More students becoming aware of numeracy/maths careers and increased interest in such a career

## 2. Numeracy CPD for staff

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Deliver numeracy CPD to whole school	DF	15 <sup>th</sup> January '20	Printing costs and time to plan £50	CPD delivered to the whole school to highlight in all curriculum areas where numeracy can be enhanced and provide possible ideas of opportunities to apply numeracy in lessons	Learning walks Teacher feedback	Students are exposed to numeracy in all lessons and their skills are enhanced by this
CPD to enhance numeracy skills of staff	DF	Termly	Printing costs and time to plan £50	CPD provided for those staff who feel they would like support with their numeracy skills (LSA's who are in maths lessons)	Teacher feedback	All teachers feel more confident with their numeracy skills and feel confident to introduce numeracy content into their lessons

## 3. Head teacher Blog content on numeracy

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Increase profile of numeracy to all stakeholders through numeracy-based content within regular 'Headteacher Blog'	HT/DF	Half-termly	Time to produce blog	Include content on a page within blog.	Parent/student staff feedback	Increased exposure to numeracy-based puzzle solving reported via feedback

## 4. Strengthen parental engagement

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Provide KS3 and KS4 revision guides to parents	DF	October 2019	Printing costs	Design a revision guide for parents of KS3 and KS4 students so they can provide help for their children with their maths	Parental survey	Parents feel more confident about what they can do to help their children with maths leading to better outcomes for the students

**5. Links with feeder primary schools**

Key Actions	Who	When	Support/£££	Monitoring & Milestones	Evaluation	Success Outcomes
Create links with feeder primary schools by offering numeracy CPD sessions with the primary teachers	DF	On-going	Planning/delivery time and printing costs	Arrange dates to go into our feeder primary schools to support teachers to deliver numeracy in preparation for the students moving up into Benfield	Teacher feedback	Students enter Benfield with a greater understanding of how numeracy/maths is taught in Benfield allowing a smooth transition from primary to secondary school