

The Gnosall St Lawrence CE Primary Academy mathematics curriculum is designed to equip children with the skills, knowledge and resilience to become confident mathematicians. Through varied and high-quality activities, we focus on the development of fluency, reasoning and problem solving skills at all stages. Pupils are required to explore mathematics in depth, using appropriate vocabulary to reason logically and explain their ideas. A range of mathematical resources are used in order to aid learning, with children developing familiarity with concrete, pictorial and abstract forms.

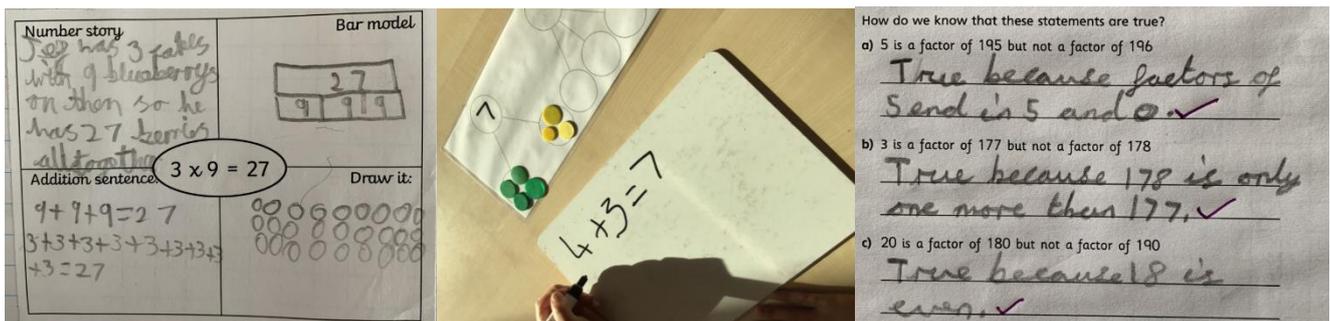
How we teach maths:



Across the school, teachers follow the White Rose Maths small steps. This programme aims to break the National Curriculum down into small steps to create a culture of deep understanding, confidence and competence in maths. These small steps form our long and medium term planning for mathematics and provide children with opportunities to develop fluency, reasoning and problem solving skills. Within our maths curriculum, reasoning and problem solving is embedded into all of our lessons rather than teaching “stand-alone” reasoning and problem solving lessons.

Verbal feedback is a key part of our maths teaching to ensure misconceptions are addressed quickly and to ensure each child is being sufficiently challenged within lessons. As children move through our school, they are also given further opportunities to peer and self-assess maths work.

In addition to high-quality maths lessons, children also develop their mathematic skills using the initiatives detailed below.



KIRFs: KIRFs are designed to support the development of mental maths skills that underpin much of the daily work in our school. They are particularly useful when calculating, adding, subtracting, multiplying or dividing. They contain number facts (such as number bonds and multiplication tables) that need constant practise and rehearsal so that children can recall them quickly and accurately.

Instant recall of facts helps enormously with mental agility in maths lessons. When children move onto written calculations, knowing these key facts is very beneficial. For your child to become more efficient in recalling them easily, they need to be practised frequently and for short periods of time.

| | |
|--|-----------|
| Date: | |
| Year 2 - Autumn 1 - KIRF Progress Check | |
| Number bonds for each number to 20 | |
| 10 + 3 = | 15 - 2 = |
| 13 + 5 = | 14 - = 11 |
| 6 + 9 = | 19 - 2 = |
| 12 + 0 = | - 8 = 8 |
| 17 + 3 = | 17 - 16 = |
| 4 + = 12 | 13 - = 2 |
| + 8 = 19 | 11 - 4 = |
| 7 + 11 = | 13 - = 7 |
| 20 + 0 = | 20 - = 3 |
| 14 + 3 = | - 5 = 9 |

Each half-term, children will focus on one Key Instant Recall Fact (KIRF) to practise and learn at home and in school. These KIRFs form part of learning log or homework tasks and parental support booklets are available for each KIRF.



Score: /20

How can you help at home?

- The secret to success is practising little and often. Can you practise these KIRFs while walking to school or during a car journey to make them part of the everyday routine? It may work to have a fact a day or a fact a week rather than learning them all at once.
- Test the parent games. Children need to be secure with these facts in order to check answers given by parents.
- Use TTRockstars log in to practise number bonds. This can be used on laptop, PC, tablet or phone.
- Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Speedy Maths: In KS1 and KS2, children are given the opportunity to practise and secure fluency skills daily. This often forms part of their early morning work when they arrive at school. In addition to securing fluency skills, this is also an opportunity for children to revisit prior learning.

Year 2 - Morning Tasks
Adding three 1 digit numbers

w/c 07.12.20

| Monday | Tuesday |
|--|---|
| 1) 2+2+4=8 ✓ 2) 5+1+3=9 ✓ 3) 6+3+8=17 ✓ 4) 1+1+2=4 ✓ 5) 7+5+4=16 ✓ 6) 4+7+3=14 ✓ 7) 9+1+2=12 ✓ 8) 6+6+5=17 ✓ 9) 5+4+2=11 ✓ 10) 8+8+8=24 ✓ | 1) 3+3+3=9 ✓ 2) 7+7+4=18 ✓ 3) 6+2+5=13 ✓ 4) 9+8+7=24 ✓ 5) 2+2+2=6 ✓ 6) 9+6+5=20 ✓ 7) 4+4+4=12 ✓ 8) 5+5+2=12 ✓ 9) 1+2+3=6 ✓ 10) 7+2+3=12 ✓ |
| Wednesday | Thursday |
| 1) 2+2+6=10 ✓ 2) 3+1+4=8 ✓ 3) 5+5+5=15 ✓ 4) 4+3+1=8 ✓ 5) 6+5+6=17 ✓ 6) 4+4+7=15 ✓ 7) 8+8+8=24 ✓ 8) 2+5+2=9 ✓ 9) 4+6+4=14 ✓ 10) 9+9+9=27 ✓ | 1) 4+3+2=9 ✓ 2) 6+6+1=13 ✓ 3) 9+4+3=16 ✓ 4) 7+7+7=21 ✓ 5) 3+4+5=12 ✓ 6) 4+5+6=15 ✓ 7) 2+3+4=9 ✓ 8) 1+2+3=6 ✓ 9) 4+5+5=14 ✓ 10) 6+6+8=20 ✓ |
| Friday | Challenge |
| 1) 3+4+6=13 ✓ 2) 3+8+9=20 ✓ 3) 5+6+8=19 ✓ 4) 4+8+6=18 ✓ 5) 4+5+3=12 ✓ 6) 1+1+6=8 ✓ 7) 7+8+7=22 ✓ 8) 9+2+2=13 ✓ 9) 8+3+3=14 ✓ 10) 6+7+1=14 ✓ | I think of a number. I add 7 then I add 8. My answer is 25. What was my starting number? 10 ✓ I think of a number. I add 3 then I add 5. My answer is 17. What was my starting number? 9 ✓ |

Speedy Morning Maths!

Week Beginning 07/12/20

| Monday | Tuesday | Wednesday |
|--|--|---|
| 96 x 100 = 9600 ✓ 370 + 1000 = 1370 ✓ 87 = 87 ✓ 8 x 4 x 10 = 320 ✓ 1/2 x 1/2 = 1/4 ✓ 374,014 - 999 = 373,015 ✓ 1 1/2 + 3 1/2 = 5 ✓ 56 ÷ 8 = 7 ✓ Simplify = 10/20 = 1/2 ✓ Half 310 = 155 ✓ Score: 9 | 470 x 1000 = 470,000 ✓ 21 + 100 = 121 ✓ 72 = 72 ✓ 9 x 4 x 3 = 108 ✓ 3 1/2 = 3 1/2 ✓ 2 1/2 + 2 3/4 = 5 1/4 ✓ 49 ÷ 7 = 7 ✓ Simplify = 12/12 = 1 ✓ Half 1250 = 625 ✓ Score: 10 | 0.5 x 10 = 5 ✓ 1270 + 1000 = 2270 ✓ 32 = 32 ✓ 7 x 1 x 3 = 21 ✓ 2/5 x 2/5 = 4/25 ✓ 984,221 - 999 = 983,222 ✓ 5 1/4 + 3 3/4 = 9 ✓ 63 ÷ 9 = 7 ✓ Simplify = 10/20 = 1/2 ✓ Half 10,000 = 5,000 ✓ Score: 10 |
| Thursday | Friday | What's gone well this week? |
| 8.32 x 1000 = 8320 ✓ 1.9 + 10 = 11.9 ✓ 52 = 52 ✓ 5 x 5 x 2 = 50 ✓ 546,009 - 999 = 545,010 ✓ 7 1/2 + 1 1/2 = 9 ✓ 36 ÷ 6 = 6 ✓ Simplify = 3/3 = 1 ✓ Half 8.6 = 4.3 ✓ Score: 9 | 10.7 x 100 = 1070 ✓ 23.09 + 1000 = 1023.09 ✓ 92 = 92 ✓ 8 x 9 x 3 = 216 ✓ 1 1/2 x 1 = 1 1/2 ✓ 965,066 - 999 = 964,067 ✓ 1 1/2 + 2 1/2 = 4 ✓ 55 ÷ 5 = 11 ✓ Simplify = 12/12 = 1 ✓ Half 5 = 2.5 ✓ Score: 10 | What's gone well this week? height scores |
| What do you need to focus on next week? 10s | | |

Morning Maths

Week Beginning: 07.12.20

| Monday | Tuesday |
|--|---|
| 1. 84 + 12 = 96 ✓ 2. 62 - 15 = 47 ✓ 3. 362 + 365 = 727 ✓ 4. 729 - 156 = 573 ✓ 5. 42 + 7 = 49 ✓ 6. 56 + 8 = 64 ✓ 7. 720 ÷ 10 = 72 ✓ 8. 4200 + 100 = 4300 ✓ 9. 56 + 56 = 112 ✓ 10. 21 x 2 = 42 ✓ | 1. 32 + 17 = 49 ✓ 2. 97 - 11 = 86 ✓ 3. 728 + 385 = 1113 ✓ 4. 531 - 285 = 246 ✓ 5. 9 x 6 = 54 ✓ 6. 56 + 8 = 64 ✓ 7. 1900 ÷ 10 = 190 ✓ 8. 4500 + 100 = 4600 ✓ 9. 104 + 14 = 118 ✓ 10. 21 x 0 = 0 ✓ |
| Wednesday | Thursday |
| 1. 532 + 10 = 542 ✓ 2. 182 + 14 = 196 ✓ 3. 245 + 532 = 777 ✓ 4. 428 - 226 = 202 ✓ 5. 12 + 7 = 19 ✓ 6. 63 + 7 = 70 ✓ 7. 2800 ÷ 10 = 280 ✓ 8. 78,500 + 100 = 78,600 ✓ 9. 139 + 1 = 140 ✓ 10. 39 x 1 = 39 ✓ | 1. 102 + 12 = 114 ✓ 2. 78 - 26 = 52 ✓ 3. 842 + 153 = 995 ✓ 4. 729 - 156 = 573 ✓ 5. 8 x 7 = 56 ✓ 6. 21 + 7 = 28 ✓ 7. 1010 ÷ 10 = 101 ✓ 8. 10,200 + 100 = 10,300 ✓ 9. 139 + 139 = 278 ✓ 10. 39 x 0 = 0 ✓ |
| Friday | Extension Challenge |
| 1. 93 + 25 = 118 ✓ 2. 87 - 24 = 63 ✓ 3. 4219 + 3382 = 7601 ✓ 4. 5281 - 2931 = 2350 ✓ 5. 8 x 7 = 56 ✓ 6. 14 + 7 = 21 ✓ 7. 72 ÷ 10 = 7.2 ✓ 8. 19000 + 1000 = 20000 ✓ 9. 5271 + 5271 = 10542 ✓ 10. 2869 x 1 = 2869 ✓ | 1. Complete spelling/handwriting practice. 2. Respond to mp marking/feedback (respond in purple pen) 3. Read independently. |

TTRockstars and Numbots:



Each pupil has their own log in to access Times Tables Rockstars and Numbots. This programme aims to build speed and accuracy of multiplication and number facts– the more facts your child remembers, the easier it is for them to tackle more complex calculations.

TTRockstars/Numbots allows teachers to set specific targets within their classes meaning children play games set at their level to help revise a specific multiplication table or number fact group. Children's log ins are recorded in reading diaries or learning logs and this programme can be accessed at home via any device connected to the internet.