

# Instructions

- Solve the puzzles below (in base 10) by any means
- Convert the answers to base 3
- Write the answers in the boxes to the right, including leading zeroes.
- Colour the squares containing a 1 red; containing a 2 blue; leave 0 unshaded.
- When finished, place your completed entry in the box.

Winner will be selected randomly from correct entries.

Name: \_\_\_\_\_

Puzzle Vision Competition

## Puzzles

1.  $5!$
2. 29 December is this day of the (non-leap) year
3. Smallest 4-digit prime
4.  $21^2 + 22^2$
5. The year of the Battle of Hastings
6. The word "leet" in leet-speak, or approx melting point of gold in Kelvins.
7. Apply look-and-say to 23
8. Pick a three digit number, no digits the same and largest digit first. Reverse it, and find the difference ( $d$ ) between this and your original pick. Reverse the digits of  $d$  & add to  $d$ . Then add 4
9. The product of 17 and the 17th prime.
10. The sum of 7 consecutive primes starting from 97. It is a palindrome and a prime.

	729	243	81	27	9	3	1
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							