**Typed up post-it notes of things delegates would like to achieve, or be supported in achieving, through attending the NRICH programme.**

The only change made has been substituting ‘low-attaining’ for ‘low-ability’ where it occurred.

1. Given a clearer understanding of working at greater depth, including with NRICH resources
2. Questioning for less experienced teachers
3. Is there a progressive language structure tool that school could use – apart from Tower Hamlets?
4. Problem solving links with the new scheme we are using
5. How can lower-attaining children be challenged?
6. Developing conjecture
7. I want to build my own subject knowledge in the various skills gained from problem solving
8. I want to understand how to develop problem-solving skills within pupils. I want to consider and know what resources can support this and how to apply this to my teaching
9. To support teachers to develop confidence in teaching problem-solving skills
10. To develop children’s confidence and skills in problem solving
11. Develop subject knowledge, strategies/questioning and encourage independent thinking
12. Support teachers to achieve greater depth
13. Being a good model
14. Ideas (activities)
15. Ideas (pedagogy)
16. We are launching Maths Mastery in Reception and Year 1 – need to develop problem solving of rest of school
17. Developing problem solving in EYFS
18. Making children aware of what problem-solving skills they are using or developing
19. Developing resilience when faced with problem-solving activities
20. Developing skills to extend/explain problem solving without giving too much away
21. To build confidence and resilience with my classroom when it comes to problem solving
22. To develop my skills in challenging and questioning my children to develop their learning
23. To develop enjoyment of maths through problem solving
24. To develop a more collaborative learning environment where we all talk about our learning (confidently)
25. To develop children’s ability to learn from mistakes
26. Problem-solving ideas for Stepney Maths League
27. Improving children’s discussion when problem solving and independence
28. What each of the problem-solving skills looks like across key stages
29. Getting insight from mistakes
30. Embed problem solving within school
31. Clearer understanding of greater depth and how to embed it across the age range/school
32. Geometry – developing conceptual understanding for lower attainers
33. Support with achieving greater depth
34. Improve the amount and quality of reasoning and explaining across the school
35. Improve the quality of questioning
36. Subject knowledge – how to use investigations to teach a range of areas
37. Problems/investigating in other areas of the maths curriculum – time/statistics etc.
38. Increase my own confidence in planning problem-solving lessons and provide strategies to teachers in my school
39. To impart knowledge of problem-solving strategies to children and widen their problem-solving abilities
40. Develop reasoning skills
41. Improve problem-solving skills
42. Develop mathematical thinking
43. Develop further the teaching of problem solving with our school for children and classroom teachers (CTs?)
44. Promoting mathematical vocabulary
45. Different problem-solving skills
46. Modelling using children to model problem-solving skills
47. To enable other teachers to feel more confident teaching problem-solving skills
48. Stages of reasoning
49. Enabling children to explain their thinking clearly
50. Applying their number/calculations knowledge in lots of different problem-solving contexts
51. How to support children making conjectures
52. To make children more confident in using problem-solving skills
53. To improve my skills and confidence in teaching children what is and how to problem solve
54. Develop children’s ability to explain why they approached a problem in a particular way (linked to verbal and written mathematical reasoning)
55. How to support my team
56. How to challenge all children working at different attainment levels
57. How to close the gaps
58. How to make teachers’ lives easier so there is lesson time spent resourcing
59. Link ideas from the sessions to what I have already started at school
60. How to differentiate for all
61. Gain support with a problem-solving approach to fractions which is a larger focus in the latest NC
62. Learn new ways to supporting children when problem solving without scaffolding too much
63. Develop a better understanding of what type of problem-solving activities I could use in my lower set that will make children successful
64. Gain support with implementing more problem-solving sessions into my planning for my set
65. To implement problem solving and talk within lesson (not just as a problem-solving day)
66. Allow children to think for themselves first than just providing the answer
67. To model problem solving to children a lot more rather than assume they know
68. How to effectively use children’s problem-solving skills in my summative assessment
69. How to become more effective with my questioning of pupils during investigations – i.e. how do I get them to articulate their thinking?
70. How to successfully develop colleagues and make them feel confident in teaching problem solving
71. Ideas for developing reasoning skills, particularly with pupils with SEND
72. Supporting colleagues on developing problem-solving skills with their classes
73. Signposting to recent research of developing mathematical thinking with pupils
74. Ensuring NRICH resources are used effectively in the school
75. How to fit these ideas into teachers’ maths teaching without them being seen as ‘separate’ (Give teachers confidence)
76. An understanding of how to fit these types of task into the curriculum
77. Fostering independent learners – resources to help – how to organise them within the classroom
78. How to engage large groups of disaffected children (mainly boys)
79. How to effectively differentiate problem solving
80. Gain a bank of problem-solving resources
81. Develop questioning to encourage problem solving
82. Confidence to use rich tasks across all attainment levels in the classroom
83. How to convince people this is worth taking up curriculum time for
84. How to maintain links with teachers from other schools to share experiences
85. Embedding problem-solving skills throughout the whole school EYFS – Year 6
86. How to lead a team eg. NQTs, school direct to feel confident with problem solving tasks
87. Improve quality of questioning
88. Evidence for recording problem solving…what it should look like?
89. Reasoning vocab and sentence structures
90. How to develop progression in explanation/reasoning language through the year groups (particularly for EAL learners)

Themes suggested by this list

