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| **KS2 Arithmetic P1 2017**  **Multiplication and division** | **Knowledge/ strategy** | **Pupils who need further teaching to address gaps in understanding**  **Date:** |
| 505 ÷ 1 = | Any ÷by 1  Conceptual understanding/ mental |  |
|  | Any tables/ division facts  Number fact recall / inverse /mental |  |
|  | Any 3 digit ÷U  Notice 581= 560+21 ( multiples of 7)  Short division/ mental, check using facts |  |
|  | Any decimal to 2dp  Using understanding of PV / mental |  |
|  | Dividing simple fractions by U  Conceptual understanding/ mental |  |
|  | Dividing simple fractions by U  Noticing need for equivalent fraction  Conceptual understanding/ jotting/ mental |  |
|  | Any TUxU  2 part calculation: (30x8) +(3x8) ; use of PV  Jottings, formal method ; check using facts &PV |  |
|  | Any multiple of 10 x multiple of 10  Use related number facts &PV: 3x40 , 30x40, mental |  |
|  | Any HTUxU  Short multiplication  Check with facts eg 100x4; 60x4;7x4 |  |
|  | Any 4 digit x1000  Using PV understanding/ mental |  |
|  | Any decimal to 1 dp x multiple of 100  Use of related facts &PV: 9x2; 0.9x2, 0.9x200 |  |
|  | Formal method with HTUxTU  Check reasonableness of answer: 400x40/ 400x50 |  |

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|  | Formal method with Th HTUxTU  Check reasonableness of answer: 4500x20/ 5000x20 |  |
|  | Formal method with HTU÷TU  Check reasonableness of answer with conceptual understanding of inverse and related facts: 17x ?=714 |  |
|  | Formal method with Th HTU÷TU  Check reasonableness of answer with conceptual understanding of inverse and related facts: 59x ?=2242 |  |
|  | Use of related facts: 10% of 500; 5% of 500; 1% of 500  Jottings |  |
|  | Use of related facts: 15% of 100= 15; 15% of 1000= 150  Jottings |  |
|  | Use of related facts: 50% of 460; 5% of 460 or 10% of 460 and 5% of 460  Jottings |  |
|  | Conceptual understanding through array  Method |  |
|  | Any mixed number x TU  Two part calculation  Jotting |  |
|  | Order of operations |  |

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