

- Each step has two tests, a) and b). Test a) has questions listed sequentially; test b) mixes the order and includes inverses from step 6 onwards.
- **Yr/term** shows when a child working at age-expected level should be reaching each stage.

Planet	Step	Yr/ term	Addition	Multiplication – up to 12 x N	New vocab / concepts	Challenge Steps	Challenge time
Sun	1	RAut	1+1, 2+2		addition	1	20 seconds
Mercury	2	RSpr	3+3, 4+4, 5+5			2,1	20 seconds
Venus	3	RSum	2+1, 2+3	Multiples of 10- counting	counting in — “sequence”	3,2,1	2 minutes
Earth	4	1Aut	1+9, 2+8, 3+7, 4+6, 5+5	Multiples of 5- counting		4,3,2	2 minutes
Moon	5	1Spr	4+2, 5+2, 6+2, 7+2, 9+2, 4+3, 5+3, 6+3		commutativity- addition: (3 + 2) = (2 + 3)	5,4,3	2 minutes
Mars	6	1Sum	6+6, 7+7, 8+8, 9+9	Multiples of 2- counting	“double” ; inverses	6,5,4	4 minutes
Ceres / Asteroid Belt	7	2Aut	3+8, 3+9, 4+7, 4+8, 4+9	10x table	multiplication	7,6,5	4 minutes
Jupiter	8	2Spr	5+4, 5+6, 6+7, 8+7, 8+9	5x table	“half of”	8,7,6	4 minutes
Saturn	9	2Sum	5+9, 6+9, 7+9, 5+7, 5+8, 6+8	2x table		9,8,7	4 minutes
Uranus	10	3Aut		3x table , 4x table		10,9,8	4 minutes
Neptune	11	3Spr		6x table	commutativity- multiplication: (3 x 2) = (2 x 3)	11,10,9	4 minutes
Pluto	12	3Sum		8x table , 9x table		12,11,10	4 minutes
Haumea	13	4Aut		7x table		13,12,11	4 minutes
Makemake	14	4Spr		11x table		14,13,12	4 minutes
Eris	15	4Sum		12x table	“squared”	15,14,13	4 minutes
Sedna	16	5/6		[Uranus S3 from old NS]	x 0 , equations	Everything	7 minutes
Oort Cloud	17	5/6		[Neptune S3 from old NS]	Sq.roots, indices, x fractions	Everything	7 minutes
Interstellar Space	18	5/6		[Pluto S3 from old NS]		Everything	10 minutes