

Name:

School:

### Happy Number Grid

Shade in numbers that are Happy numbers (please note the following questions before you shade them all in and answer whilst doing activity.?)

Can you find a algorithm or quick method to find happy/unhappy numbers?

What do you notice (is there a pattern)?

Are there any types of number that are always happy or unhappy?

	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99

Please take a photo of this grid and all your workings out and send them to the following email – [alex.jones@newcastle.academy](mailto:alex.jones@newcastle.academy)

Please record the date and time that you finished this activity. Date:

Time: