What Did Professor Utterbunk Say When Asked:
Have You Ever Heard of the Planet Saturn?

1 5^3

2 5^{-3}

3 3^{-5}

4 $(-5)^{-3}$

5 $(-12)^{-2}$

6 -12^{-2}

7 $(-12)^0$

8 $(-4)^{-3}$

Answers 1-8:

T $\dfrac{1}{144}$ **M** $\dfrac{1}{125}$

P -1 **R** $-\dfrac{1}{64}$

I 125 **L** 144

U 1 **N** $\dfrac{1}{243}$

O $-\dfrac{1}{125}$ **F** -125

E $\dfrac{1}{64}$ **S** $-\dfrac{1}{144}$

9 -4^{-3}

10 10^{-5}

11 $(-10)^{-5}$

12 10^0

13 75^{-1}

14 -75^{-1}

15 $(-2)^{-4}$

16 -2^{-4}

Answers 9-16:

O 16 **I** $\dfrac{1}{75}$

T $-\dfrac{1}{75}$ **E** $-\dfrac{1}{64}$

A $-\dfrac{1}{16}$ **N** $\dfrac{1}{1000}$

T 1 **R** -75

S -64 **H** $\dfrac{1}{16}$

B $\dfrac{1}{100,000}$

U $-\dfrac{1}{100,000}$

17 $7ab^0$

18 $7ab^{-4}$

19 $\dfrac{7}{ab^{-4}}$

20 $\dfrac{7^{-2}a}{b^{-1}}$

21 $2x^3y^{-8}$

22 $\dfrac{2x^{-3}}{y^{-8}}$

23 $\dfrac{2^{-1}x^{-3}}{y^8}$

Answers 17-23:

I $\dfrac{2y^8}{x^3}$ **A** $\dfrac{7a}{b^4}$

R $2x^3y^8$ **O** $7ab^4$

F $\dfrac{7b^4}{a}$ **L** $\dfrac{1}{2x^3y^8}$

S $7a$ **A** $\dfrac{ab}{49}$

M $\dfrac{2x^3}{y^8}$ **N** $\dfrac{b}{49a}$

24 $\dfrac{3n^2}{t^{-5}}$

25 $3^4n^{-2}t^5$

26 $\dfrac{3^{-4}t^{-5}}{n^{-2}}$

27 $\dfrac{8^2c^{-1}d^{-6}}{5}$

28 $\dfrac{(-8)^2c^0}{5^{-1}d^{-6}}$

29 $\dfrac{(-8)^{-2}d^{-6}}{5c^{-1}}$

30 $\dfrac{-8^{-2}}{5^{-1}cd^0}$

Answers 24-30:

T $\dfrac{64c}{5d^6}$ **G** $-\dfrac{5}{64c}$

I $3n^2t^5$ **I** $320d^6$

R $\dfrac{n^2}{81t^5}$ **A** $\dfrac{81t^5}{n^2}$

E $320cd^6$ **S** $81n^2t^5$

R $\dfrac{64}{5cd^6}$ **N** $\dfrac{c}{320d^6}$

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