SANT NISCHAL SINGH PUBLIC SCHOOL
LADWA

CLASS - VIII

SUMMER HOLIDAY HOMEWORK

ACADEMIC SESSION
2023-24

General Instructions

The project needs to be developed and presented in this order.

a) Handwritten/ Type cover page showing project title,student's name, class, section, school's name and academic year.

b) Index page should include names of the subjects, page no. and a column for teacher's sign

c) Acknowledgements (acknowledging the institutions and persons who have helped).

d) The work is to be done in the given sequence only .

e) Page limits (for each subject); Minimum 3 Maximum no limits excluding cover page, index page and acknowledgement page

f) Google text to be avoided

g) Make a report at the end of each project.

Art integrated activity

- Prepare the sketch of manipuri dance form.

Art integrated project

- Write a note on literature of Manipur & Haryana
- Make a project report on wildlife sanctuary of Manipur & Haryana and paste pictur also.
- Use all the topics to make the comparative study of Haryana and Manipur
- Topic 1 - Comparison between the biodiversity of Manipur and Haryana
- Topic 2 – Make a list of different conservation programs and protective areas for flora and fauna along with pictures.
- Topic 3- Make a list of different species native to Manipur and paste their pictures.

English

- Write the summary of lesson ' **A Hero '** in your own words on A4 size sheet and explain any one character you like the most.
- Listen two motivational speakers and write a paragraph about **the moral values** which inspire you a lot in about 100 to 120 words.
- Do comprehension passages 1 to 5 in **BBC** module one.
- Write 10 new words with meanings from each chapters 5th and 6th and frame sentences also.
- Revise all the syllabus covered up to **May.**

Hindi

- पशु-पक्षियों की आदतें एवं स्वभाव एक जैसे होते हैं उनके बारे में जानकारी एकत्र कर परियोजना तैयार कीजिए।
- 'पानी नही तो जीवन संभव नही' विषय पर स्लोगन लिखिए।

कक्षा में कराए गए कार्य की दोहराई कीजिए।

Punjabi

- Revise the done in notebook and book.

Information technology

- Do revision Assignment of Chapter 1 &2.
- **Project Work:** **Draw and Explain:**
  a) Types of Network
  b) Different Types of Topology

Social Science

- Read the following chapters and prepare at least 15 MCQ's from each chapter.

Ch 3 – Ruling the Countryside (History)
Ch 3 – The Judiciary (Civics)

Science

Revise all the work done in notebook and book and do the practice of diagrams

Work Sheets of science

A. Tick (✓) the correct option:

1. Ordinarily kerosene oil burns in air with a yellow flame. However, in stoves, it burns with a blue flame. Which of the following statements explains the above observation?
   (a) Complete combustion of kerosene takes place in stoves. ☐
   (b) The ignition temperature of kerosene is attained easily in stoves. ☐
   (c) Stoves are made of iron and kerosene burns with a blue flame in the presence of iron. ☐
   (d) None of the above gives correct explanation. ☐
2. What are the two main hydrocarbons present in LPG?
   (a) Butane + Propane ☐ (b) Butane + Isobutane ☐
   (c) Propane + Ethane ☐ (d) Methane + Ethane ☐
3. Which of the following is a non-combustible substance?
   (a) Coke ☐ (b) Diamond ☐ (c) Coal ☐ (d) Wood ☐
4. What does the blue zone in an LPG flame indicate?
   (a) Unburnt vapours ☐ (b) Partial decomposition ☐
   (c) Moderately hot ☐ (d) Hottest zone of complete combustion
5. Arrange the following fuels in the increasing order of their calorific value:
   (i) Petrol (ii) Wood (iii) Coal (iv) Natural gas
   (a) (i)–(ii)–(iii)–(iv) ☐ (b) (ii)–(iii)–(iv)–(i) ☐
   (c) (ii)–(i)–(iii)–(iv) ☐ (d) (ii)–(iii)–(i)–(iv) ☐

B. Complete the following statements using appropriate word(s):

1. ..... is a chemical reaction in which a substance reacts with ..... to produce ..... and ..... .
2. A good fuel is one which is readily ..... , ... , burns ..... in air at a ..... rate, produces a ..... amount of ..... and does not leave ..... .
3. Fuels differ in ..... and ..... .
4. Increased concentration of carbon dioxide in air causes ..... .

C. Complete the following statements using appropriate word(s):

1. Types of plastics which can be remoulded into various shapes again and again on ..... are called ..... .
2. The process of combining of small units to form a larger unit is called ..... .
3. A fabric made out of synthetic and natural fibres mixed together to get the ..... qualities of both is called ..... fabric.

D. Match the items in Column A with those in Column B:

Column A	Column B
1. Proteins	(a) A common polymer
2. Cotton	(b) Fire resistant
3. Rayon	(c) Cellulose
4. Melamine	(d) Hot drink cups
5. Polysterene	(e) Artificial silk
6. PET	(f) Polymers of amino acids

E. Unscramble the jumbled words:

1. TPCITSREHOMAL .....
2. REROTOLYW .....

F. Very Short Answer Type Questions:

1. Name one naturally occurring polymer.

   .....

2. What are 5 R's principles of a plastic?

   .....

3. Define petrochemicals.

   .....

G. Short Answer Type Questions:

1. Why are plastic articles available in varying sizes and shapes?

   .....

   .....

2. Why should recycled plastics not be used for the storage of food?

   .....

   .....

3. Why is nylon used for making parachutes and ropes for rock climbing?

   .....

   .....

A. Tick (✓) the correct option:

1. Bharati took a piece of four substances – W, X, Y and Z. She tried to burn each of them by bringing a lighted matchstick near them. She observed that Y and Z burn readily, while W burns readily only after sustained heating. However, X does not burn at all. Among the given substances taken by Bharati, which substance has the highest ignition temperature?

   (a) W ☐ (b) X ☐ (c) Y ☐ (d) Z ☐

2. What is the heat produced by burning one gram of fuel completely known as?

   (a) Heat capacity ☐ (b) Calorific value ☐

   (c) Vapour density ☐ (d) Boiling point ☐

3. What kind of reaction is combustion?

   (a) Reduction ☐ (b) Redox ☐ (c) Substitution ☐ (d) Oxidation ☐

4. Which of the following is the best extinguisher for inflammable materials?

   (a) Water ☐ (b) Sulphur dioxide ☐

   (c) Carbon dioxide ☐ (d) Carbon monoxide ☐

5. Which of the following is an example of rapid combustion?

   (a) candle ☐ (b) cracker ☐

   (c) white phosphorus ☐ (d) sulphur ☐

6. Which of the following tables correctly matches the given zones of a candle flame with their respective characteristics?

   (a)

Zone	Characteristics
Innermost	Least hot and black
Luminous	Moderately hot and yellow

   ☐ (b)

Zone	Characteristics
Outermost	Hottest and black
Luminous	Least hot and blue

   ☐

   (c)

Zone	Characteristics
Non-Luminous	Moderately hot and yellow
Outermost	Least hot and black

   ☐ (d)

Zone	Characteristics
Non-Luminous	Least hot and blue
Innermost	Hottest and black

   ☐

B. Correct and rewrite the following statements:

1. All combustible substances must be heated to the same temperature to make them burn.

   .....

2. Any substance that can burn is an inflammable substance.

   .....

3. Spontaneous combustion starts at room temperature.

.....

C. Match the items in Column A with those in Column B:

Column A	Column B
1. CNG	(a) Nuclear reactions
2. Sun	(b) Compressed Natural Gas
3. LPG	(c) Explosion
4. Fireworks	(d) Least hot
5. Non-luminous	(e) Liquefied Petroleum Gas
6. Innermost zone	(f) Highest calorific value
7. Combustion	(g) hottest
8. Phosphorus	(h) combustible at room temperature
9. Acid rain	(i) Exothermic chemical reaction
10. Hydrogen	(j) Oxides of nitrogen and sulphur

D. Short Answer Type Questions:

1. Give reasons:

(a) We can boil water in a paper cup without burning the paper cup.

.....

.....

(b) Coal and charcoal do not flame but burn with glow.

.....

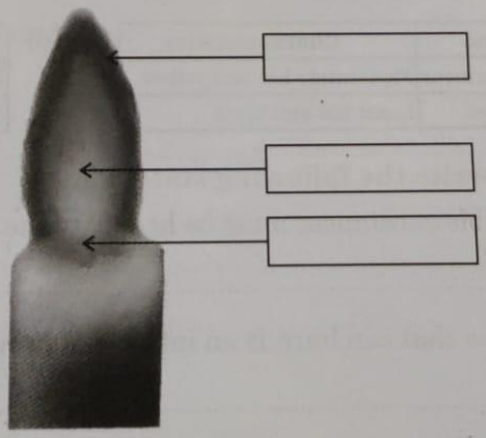
.....

(c) Petrol catches fire more easily than kerosene.

.....

.....

2. In the figure given below identify the regions mentioned in the box.



A. Tick (✓) the correct option:

1. Which one of the following synthetic fibres is obtained from wood pulp?

   (a) Rayon ☐ (b) Nylon ☐ (c) Polyester ☐ (d) Acrylic ☐

2. Which one of the following is correct about nylon fibres?

   (a) They are very strong. ☐ (b) They absorb very little water. ☐

   (c) They are fairly elastic. ☐ (d) All of these. ☐

3. Which of the following is used for making terylene fibres?

   (a) Wood pulp ☐ (b) Esters ☐ (c) Acrylic ☐ (d) Paper pulp ☐

4. Which of the following is/are needed to prepare nylon?

   (i) Coal (ii) Air (iii) Water

   (a) Only (i) ☐ (b) (i) and (ii) ☐ (c) (i) and (iii) ☐ (d) (i), (ii) and (iii) ☐

5. By which process is polythene produced?

   (a) Isomerisation ☐ (b) Polymerisation ☐ (c) Hydrogenation ☐ (d) All of these ☐

6. Which one of the following statements is correct?

   Statement 1 : Polywool is a mixture of polyester and cotton.

   Statement 2 : Polycot is a mixture of polyester and cotton.

   (a) Statement 1 is correct. ☐ (b) Statement 2 is correct.

   (c) Both statements are correct. ☐ (d) Both statements are incorrect.

B. Complete the following statements using appropriate word(s):

1. ..... are made from fibres obtained from .... sources.

2. Cellulose is made up of a large number of ..... units.

3. Rayon is mixed with ..... to make bedsheets or mixed w..... to make carpets.

4. ..... are the chemicals which give fruits their smell.

5. Plastic is a ..... in which arrangement of units can e..... or ..... .

C. Match the items in Column A with those in Column B:

Column A	Column B
1. Carbon dioxide	(a) Spontaneous combustion
2. Solid fuel	(b) Flame
3. Sodium	(c) Middle zone of candle flame
4. Global warming	(d) Incomplete combustion of coal
5. Partial combustion	(e) Outermost zone
6. Volatile fuels	(f) Coal
7. Hottest zone of candle flame	(g) Fire extinguisher
8. Carbon monoxide	(h) Melting of polar ice caps

D. Correct and rewrite the false statements:

1. Magnesium is a combustible substance.

   .....

2. For a combustible substance to catch fire, its temperature should be lower than its ignition temperature.

   .....

3. These days, the head of the safety match contains antimony trisulphide, potassium chlorate and white phosphorus with some glue and starch.

   .....

E. Short Answer Type Questions:

1. Carbon dioxide gas is a good fire-extinguisher. Why?

   .....

   .....

2. What is the difference between combustion and burning?

   .....

   .....

3. Why do we need kerosene oil to burn wood or coal?

   .....

   .....

4. Why is it easier to burn dry leaves but not green leaves?

   .....

   .....

A. Tick (✓) the correct option:

1. Which one of the following is NOT correct about plastics?
   (a) Plastics can be moulded into different shapes. ☐
   (b) Plastics are good conductors of heat and electricity. ☐
   (c) Plastics are chemically unreactive. ☐
   (d) Plastics are light, strong and durable. ☐
2. Which one of the following statements is correct?
   Statement 1: Terylene is a popular fibre.
   Statement 2: Polyester fabric is wrinkle resistant.
   (a) Statement 1 is correct ☐
   (b) Statement 2 is correct ☐
   (c) Both statements 1 and 2 are correct ☐
   (d) Both statements are incorrect ☐
3. Which one of the following is an example of thermoplastic?
   (a) Polythene ☐ (b) Polyvinyl chloride ☐
   (c) Melamine ☐ (d) Both (a) and (b) ☐
4. Which of the following statements is NOT true?
   (a) Polymers occur in nature. ☐
   (b) Nylon is used in the making of parachutes. ☐
   (c) Cellulose is made up of glucose units. ☐
   (d) Nylon thread is weaker than cotton thread.
5. Which of these clothes dry faster in rainy season? ☐
   (a) Cotton ☐ (b) Wool ☐ (c) Polyester ☐ (d) Silk ☐

B. Correct and rewrite the following statements:

1. A monomer is made of smaller units called polymers.

   .....

2. Synthetic fibres are obtained from plants and animals.

   .....

3. Some plastics are biodegradable.

   .....

C. Unscramble the jumbled words:

1. MPORLEY .....
2. TTRYEOCR .....

D. Match the items in Column A with those in Column B:

Column A	Column B
1. Polyester	(a) Thermoset
2. Acrylic	(b) Prepared by using wood pulp
3. Rayon	(c) Used for making parachutes and stockings
4. Nylon	(d) Used as a substitute for wool
5. Plastic	(e) Fabrics do not wrinkle easily
6. Bakelite	(f) Ethylene units

E. Very Short Answer Type Questions:

1. Name the plastic whose sheets are used for packing liquids.

   .....

2. Mention one disadvantage of synthetic fibres.

   .....

3. How is rayon different from synthetic fibres?

   .....

F. Short Answer Type Questions:

1. Can we store Jams, Jellies and pickles in plastic containers? Give reason.

   .....

   .....

2. Why should we use a cotton carry bag or jute bag while going for shopping?

   .....

   .....

3. Explain why plastic containers are favoured for storing food?

   .....

   .....

4. Why do electric wires have plastic covering and handles of screw drivers are made plastic?

   .....

   .....

❖ **Maths**

Revise all the chapters done in class

1.Write the squares and cubes of number from 1 to 20.

Numbers	1	2	3	4	5	6	7	8	9	10
Squares										
Cubes										
Number	11	12	13	14	15	16	17	18	19	20
Squares										
Cubes										

2.Write the formula of the area of square, rectangle ,triangle ,parallelogram, rhombus, quadrilateral ,trapezium, circle and sector.

3.From a newspaper choose a page record all the preposition. Prepare a frequency distribution table and draw frequency curve(graph).

4.Complete the following magic square.

22		18
17	21	25

		35
	34	
33	38	

13	6	11

5.DELHI Iis coded as 73541 and CALCUTTA as 82589662, how can CALICUT be coded? Similarly write any 5 cities of India and code it?

worksheet1

1. Choose the correct option.

a. Which of the following is not a rational number?

i. 1×1 ii. 0×1 iii. $0 \div 1$ iv.

b. The additive inverse of $-\frac{3}{8}$ is

i. $\frac{8}{3}$ ii. $-\frac{8}{3}$ iii. $\frac{3}{8}$ iv.

c. Which of the following rational numbers lies between 3 and 4?

i. $\frac{7}{2}$ ii. $\frac{9}{2}$ iii. $\frac{11}{2}$ iv.

d. The reciprocal of 1 is

i. $\frac{0}{1}$ ii. 1 iii. $\frac{1}{2}$ iv.

e. $\frac{8}{3} \times \left(\frac{3}{7} \times \frac{7}{4}\right)$ is equal to

i. 8 ii. 4 iii. 2 iv.

2. Fill in the blanks.

a. _____ is the rational number which exactly lies in the middle of 2 number line.

b. The denominator of a rational number cannot be _____.

c. $\frac{1}{5} \times \frac{[\quad]}{[\quad]} = \frac{[\quad]}{[\quad]} \times \frac{1}{5} = 1.$

d. For any rational number a, $a \times 1 =$ _____ $= a$.

e. $\frac{1}{2} \times \left(\frac{3}{7} + \frac{[\quad]}{[\quad]}\right) = \left(\frac{1}{2} \times \frac{[\quad]}{[\quad]}\right) + \left(\frac{[\quad]}{[\quad]} \times \frac{5}{8}\right).$

3. Match the following.

a. $\frac{a}{b} + \left(\frac{c}{d} + \frac{e}{f}\right) = \left(\frac{a}{b} + \frac{c}{d}\right) + \frac{e}{f}$

b. $\frac{a}{b} \times \left(\frac{c}{d} + \frac{e}{f}\right) = \left(\frac{a}{b} \times \frac{c}{d}\right) + \left(\frac{a}{b} \times \frac{e}{f}\right)$

c. $\frac{a}{b} + \frac{c}{d} = \frac{c}{d} + \frac{a}{b}$

i. Multiplicative identi

ii. Additive identity

iii. Distributive proper

1. **Choose the correct option.**

a. $(-0.5)^{-3}$
i. 8 ii. −6 iii. −8 iv. 6

b. $-\left(-\sqrt[3]{125}\right)^{3}$
i. −125 ii. 5 iii. −15 iv. 125

c. $153^{16-\sqrt{256}} =$
i. 0 ii. 1 iii. 3 iv. 81

d. If $a = -1, b = -2, c = 3$, $2a + 2^b \times 2^c =$
i. 0 ii. 1 iii. −1 iv. 4

e. $a^{-14} \times a^{17} \div a^3 =$
i. 0 ii. 1 iii. a^6 iv. a^8

2. **Write T for true and F for false.**

a. 0.3×10^5 is a number in standard form.

b. 6×10^{-2} is a number in standard form.

c. 1^0 is not defined.

d. Cube root means having the power/exponent as $\frac{1}{3}$.

e. $6^{-1} + 7^{-1} = 13^{-1}$

3. **Match the following.**

a.	7^{-2}	i.	$\frac{1}{49}$
b.	7^{-2}	ii.	49
c.	-7^2	iii.	−49
d.	$-7^2 \times 7^{-2}$	iv.	−1
e.	$-7^{-2} + 7^{-2}$	v.	0

4. **Fill in the blanks.**

a. $(\_\_\_\_)^m = a^m \times b^m$

b. $a^n = b^n, n \neq 0 \Rightarrow$ _____.

c. When we divide two numbers whose bases are the same, then their powers are _____

worksheet 2

1. Choose the correct option.

a. The negative of a rational number is called its
   i. additive inverse
   ii. multiplicative inverse
   iii. additive identity
   iv. multiplicative identity

b. Which of the following methods can be used to find rational numbers between two giv rational numbers?
   i. LCM method
   ii. Mean method
   iii. Either i or ii
   iv. Neither i nor ii

c. $\frac{4}{11}+\left(\frac{2}{11}+\frac{5}{11}\right)$ is equal to
   i. $\left(\frac{4}{11}+\frac{2}{11}\right)+\frac{5}{11}$
   ii. 1
   iii. Neither i nor ii
   iv. Either i or ii

d. The multiplicative identity of rational numbers is
   i. −1
   ii. 0
   iii. 1
   iv. None of these

e. The multiplicative inverse of $\frac{9}{2}$ is
   i. $\frac{9}{2}$
   ii. $\frac{2}{9}$
   iii. $-\frac{9}{2}$
   iv. $-\frac{2}{9}$

2. Fill in the blanks.

a. For any rational number a, $a + (-a) = (-a) + a =$ ____.

b. $\frac{1}{8}\times\left(\frac{\square}{\square}+\frac{2}{7}\right)=\left(\frac{\square}{\square}\times\frac{3}{7}\right)+\left(\frac{1}{8}\times\frac{\square}{\square}\right)$.

c. $\frac{-12}{13}+$ ____ $=\frac{-12}{13}$.

d. $\frac{\square}{\square}\times\frac{11}{21}=1$.

e. $\frac{1}{3}\times\left(\frac{5}{9}\times\frac{\square}{\square}\right)=\left(\frac{1}{3}\times\frac{\square}{\square}\right)\times\frac{5}{8}$

3 Match the following.

a. Multiplicative identity	i. $-\frac{1}{2}$
b. Additive identity	ii. $\frac{1}{2}$
c. Reciprocal of 2	iii. 0
d. $-\frac{4}{5}\times\frac{5}{4}$	iv. 1
e. Additive inverse of $-\left(-\frac{1}{2}\right)$	v. −1

4. **Fill in the blanks.**

a. $21 \times 23 = (\_\_)^2 - 1$

b. The number of non-perfect cube numbers between 5^2 and 6^2 = _____.

c. A perfect square of _____ number of n digits has $\frac{n+1}{2}$ digits in its square root.

d. 6, 8 and 10 is a _____ triplet.

e. $\left(3\frac{1}{2}\right)^2 =$ _____.

. **Solve the following.**

a. By which least number should 1331 be multiplied so that it is a perfect square?

b. By which least number should 1250 be divided so that it is a perfect square?

c. Find the number of non-perfect square numbers between the squares of 23 and 24.

d. Find the product of the following two consecutive odd or even natural numbers wit ut actual multiplication:

i. 16, 18

ii. 13, 15

iii. 21, 23

e. Simplify.

i. $\sqrt{196} + \left(\frac{1}{2}\right)^2$

ii. $2.8 \times \sqrt{36+64}$

worksheet 3

1. Choose the correct option.

a. Which of the following is not a rational number?

i. 1×1 ii. 0×1 iii. $0 \div 1$ iv. $1 \div 0$

b. The additive inverse of $-\frac{3}{8}$ is

i. $\frac{8}{3}$ ii. $-\frac{8}{3}$ iii. $\frac{3}{8}$ iv. $\frac{5}{8}$

c. Which of the following rational numbers lies between 3 and 4?

i. $\frac{7}{2}$ ii. $\frac{9}{2}$ iii. $\frac{11}{2}$ iv. $\frac{13}{1}$

d. The reciprocal of 1 is

i. $\frac{0}{1}$ ii. 1 iii. $\frac{1}{2}$ iv. $\frac{1}{0}$

e. $\frac{8}{3} \times \left(\frac{3}{7} \times \frac{7}{4}\right)$ is equal to

i. 8 ii. 4 iii. 2 iv. 1

2. Fill in the blanks.

a. _____ is the rational number which exactly lies in the middle of 2 and 3 on the number line.

b. The denominator of a rational number cannot be _____.

c. $\frac{1}{5} \times \frac{[\quad]}{[\quad]} = \frac{[\quad]}{[\quad]} \times \frac{1}{5} = 1.$

d. For any rational number a, $a \times 1$ = _____ $= a$.

e. $\frac{1}{2} \times \left(\frac{3}{7} + \frac{[\quad]}{[\quad]}\right) = \left(\frac{1}{2} \times \frac{[\quad]}{[\quad]}\right) + \left(\frac{[\quad]}{[\quad]} \times \frac{5}{8}\right).$

3. Match the following.

a. $\frac{a}{b} + \left(\frac{c}{d} + \frac{e}{f}\right) = \left(\frac{a}{b} + \frac{c}{d}\right) + \frac{e}{f}$

b. $\frac{a}{b} \times \left(\frac{c}{d} + \frac{e}{f}\right) = \left(\frac{a}{b} \times \frac{c}{d}\right) + \left(\frac{a}{b} \times \frac{e}{f}\right)$

c. $\frac{a}{b} + \frac{c}{d} = \frac{c}{d} + \frac{a}{b}$

i. Multiplicative identity

ii. Additive identity

iii. Distributive property

Worksheet 4

1. Write T for true and F for false.

a. $\left\{(16)^2\right\}^{1/4} = 4$

b. $6^{-1} \times 12^2 \times 24^{-1} = 1$

c. $8^2 \times 4^{-1} - 16$ is not defined.

d. $\sqrt{5^3}$ means 5 to the power $\frac{2}{3}$

e. $-3^2 = 9$

f. $\frac{2^4 - 4^2}{2^1 - 2^0}$ is not defined.

g. $99^4 - (\sqrt{81} \times 11)^3 = 99$

h. $3 + 3^2 \times 3^{-1} \div 3^{-1} = 6$

i. $5 - 5^{-1} \times 5^2 \div 5 + 5^0 = 5$

j. $5(5^{-1} \div 5^{-2}) - 5^2 = 0$

2. Match the following.

a.	$\left(4^{\frac{1}{4}}\right)^2$	i.	-2
b.	$-4^{0.5}$	ii.	2
c.	$\frac{2^4 - 4^2}{4^1 \times 4^0}$	iii.	1
d.	$\frac{2^4 \times 4^2}{4^1 \times 4^3}$	iv.	-1
e.	$-4^2 \times 4^{-2}$	v.	0

3. Fill in the blanks.

a. The value of $8^{-1} \times 2^4 \times 4^{-1}$ is _____.

b. The value of $10^2 - 3^2 \div 9^{-1}$ is _____.

c. The value of $\frac{3^4 + 3^2}{3^1 - 3^2}$ is _____.

d. $\left(\_\_^3\right)^2 = 729$ _____.

e. $(-2)^{10} =$ _____.

f. $5^{-3} \times 5^4 \div 5^{-2} =$ _____.

g. $5^{-2} + 5^2 =$ _____.