

## CROSSWORD PUZZLE ACTIVITY

A	H	E	T	T	I	O	H	M	B	S	A	O	N	E	A	D	G
R	E	N	W	Z	N	W	E	H	F	N	O	H	S	S	O	B	A
M	T	B	O	S	K	W	B	A	Y	C	R	C	Q	W	O	M	S
S	E	E	R	A	T	I	O	N	A	L	D	E	S	I	G	N	E
M	R	R	M	S	I	I	F	B	J	L	Y	G	I	K	O	R	J
N	O	R	N	B	L	T	H	R	E	O	A	S	M	I	L	E	W
O	D	I	S	K	S	C	K	L	T	O	O	R	T	M	B	K	K
O	U	N	S	E	E	R	O	S	E	K	O	U	M	Z	Q	U	E
I	P	S	D	R	C	W	X	D	W	P	T	C	R	E	S	T	L
L	L	E	E	O	R	O	V	G	P	I	V	U	P	I	F	G	F
K	E	R	N	L	E	N	Z	E	T	S	O	M	R	E	T	U	O
P	X	W	O	Z	R	Y	I	S	M	K	L	S	U	O	W	W	U
Q	Z	H	V	S	O	G	B	H	J	X	V	R	V	T	I	K	R
R	K	A	O	E	L	U	A	Q	U	A	B	R	T	S	A	M	O
Z	L	O	L	B	S	R	I	K	G	U	R	C	P	O	S	I	E
Y	T	N	O	W	U	Q	S	W	L	R	Z	D	F	R	I	N	M
F	Q	M	N	C	M	M	K	L	Y	Q	W	B	O	I	G	O	Y
E	R	T	E	A	A	T	N	O	S	T	R	C	P	E	N	M	R

1. There are three types of site-directed mutagenesis including insertions, deletions and \_\_\_\_\_.
2. This type of protein engineering assume that Natural sequence can be modified to improve a certain function of protein
3. A few \_\_\_\_\_-based mutagenesis methods have been developed and one of the most widely used methods is the “overlap extension PCR mutagenesis” method.
4. \_\_\_\_\_ primers are used in the first polymerase chain reaction (PCR) of overlap extension PCR mutagenesis where two PCRs take place, and two double-stranded DNA products are obtained
5. A \_\_\_\_\_ is a double-stranded molecule of nucleic acid derived from different sources, such as from different homologous chromosomes or even from different organisms.
6. Two PCR products are used as the template for a ligation PCR that contains the \_\_\_\_\_ primer pair.
7. \_\_\_\_\_ design is a knowledge-based protein design