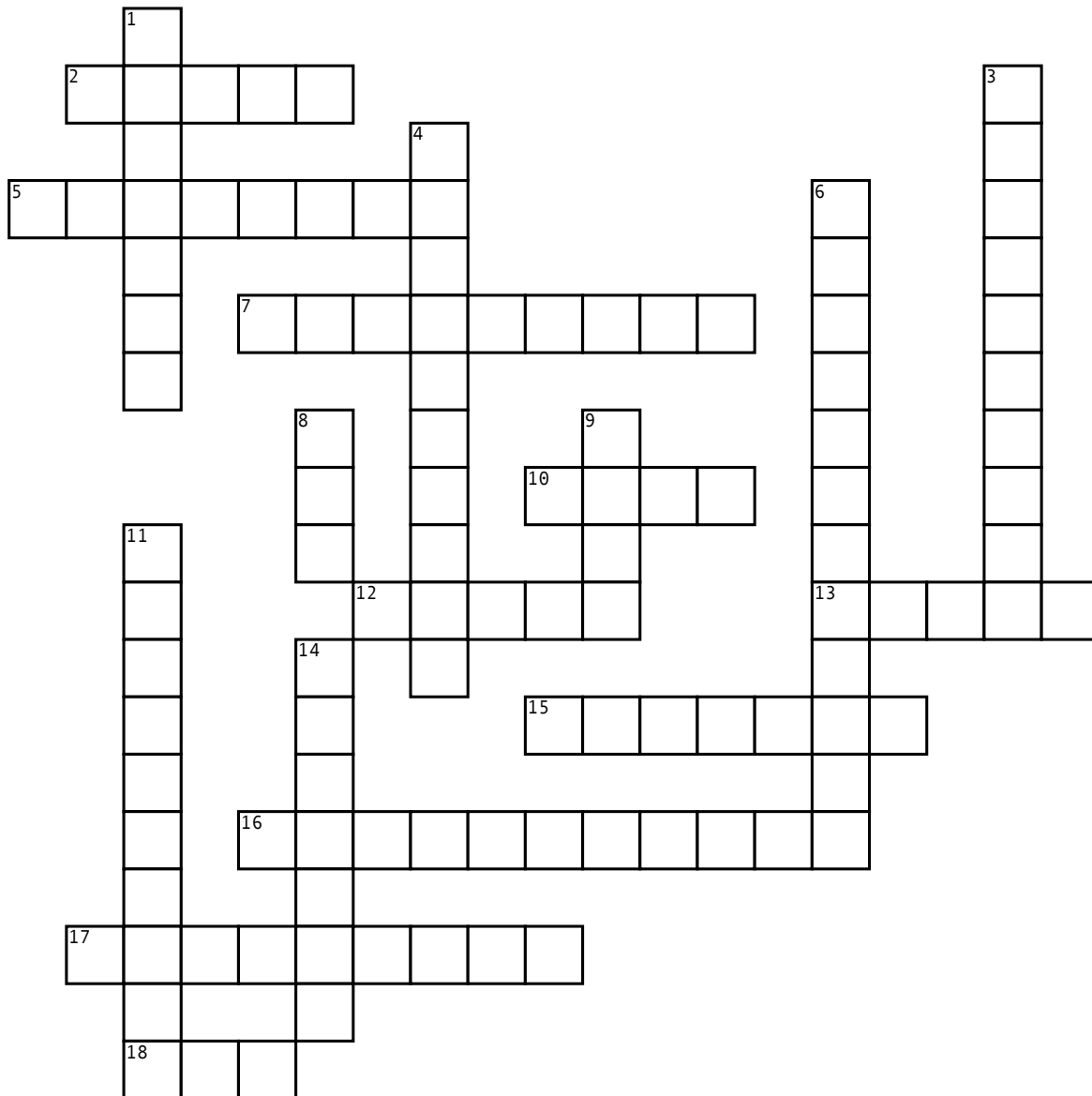


Translation



Across

2. Initiation factor 2 function is to bind GTP; and delivers fMet-tRNA to initiation _____.

5. Takes place in the elongation stage, while in this site tRNAs move from a different site into this site.

7. One of the three sites in a ribosome occupied by a tRNA during translation. In this site All charged tRNAs (with the exception of the initiator tRNA) first enter the this site.

10. Chemical reaction in which an aminoacyl-_____ synthetase attaches an amino acid to its corresponding _____. (_____ charging)

12. During initiation, proteins that attach to the _____ tail interact with proteins that bind to the 5' cap, enhancing the binding of the small ribosomal subunit to the 5' end of the mRNA.

13. 50S ribosomal subunit stabilizes tRNAs and _____ acids

15. Initiation factor 3 (IF-3) binds to the small ribosomal _____ and prevents the large _____ from binding during initiation

16. Phase in which protein synthesis halts at the _____ codon and the translation components are released from the ribosome.

17. Translation takes place in?

18. Once the charged tRNA is in the A site, GTP is cleaved to form _____?

Down

1. initiation _____ consists of, the small ribosomal subunit, the mRNA, the initiator tRNA with its amino acid (fMet-tRNA), one molecule of GTP, and several initiation factors.

3. Phase in which the components necessary for translation are assembled at the ribosome.

4. Phase in which amino acids are joined, one at a time, to the growing polypeptide chain.

6. Initiation factor 1 function is to enhance _____ of large and small subunits of ribosome

8. Occurs during the elongation phase and its function is to provide energy.

9. 30S ribosomal subunit attaches to _____?

11. Function is to aid in exporting mRNA from the nucleus to the cytoplasm and promotes the initial (pioneer) round of translation.

14. Protein required for the termination of translation; binds to a ribosome when a stop codon is reached and stimulates the _____ of the polypeptide chain, the tRNA, and the mRNA from the ribosome. (_____ factor)