

26. protein synthesis

27. Strand A was used to produce the RNA, because the nitrogen bases of the RNA are the ones that would pair up with those in strand A.

28. UGA

29. DNA does not leave the nucleus, so a messenger or carrier must take the genetic information from the DNA in the nucleus to the ribosomes in the cytoplasm where protein synthesis occurs. Messenger RNA performs this function.

30. Plant all the seeds, and when they flower, cross-pollinate them. The seeds produced from these crosses would either all be round, which means that the original seeds were RR , or some would be round and some would be wrinkled, which means that some of the original seeds were Rr . Students might also suggest that they could cross the plants that grow from the seeds with plants of a known genotype and observe the traits of the offspring.