The Candle Company Challenge

The Bright Lights Candle Company is manufacturing boxes of Hanukkah candles before the holiday. They want each box of candles to contain enough candles for the eight nights of Hanukkah, plus two extra candles in case some of the candles accidentally break. On the first night of Hanukkah, Jewish people use two candles in their menorah, one to stand for the first night, and a second candle as a “helper” to light the first candle. On the second night, they use three candles, on the third night they use four candles, and so on. How many candles should the Bright Lights Candle Company put in each box?

Show your work below and explain how you got your answer.