In the case where you need to borrow pv dollars (pv stands for present value) and you wish to have fv dollars (fv stands for future value) in savings after n pay periods, the amount that must be paid into the account at the end or the beginning of each period in order to pay off the loan and to have fv dollars in the account after the n pay periods can be calculated using the PMT function as follows:

=PMT(rate,n,pv,fv,sw)

where rate is the interest rate in fraction or percent for each period, n is the number of periods over which the payment is made, pv is present value at the beginning of the loan, fv is the future value at the end of the loan, and sw is a switching function which determines whether the payment is made at the beginning of the month (sw = 1) or at the end of the month (sw = 0) (in most cases, this is 0). If you desire to obtain payments on a loan, pv is the amount of the loan and fv is 0. If you are interested only in having so much in savings at the end of n time periods, pv = 0, and fv is the amount you wish to have in the account after n time periods.

PPMT returns the amount paid on the principle for that payment with the following call:

=PPMT(rate,pp,n,pv,fv,sw)

where all the variables have the same definitions as in PMT except pp where this represents the pay period between 1 and n. For example, if you wanted to know how much of your payment for the 10th month went toward principle, you would put in 10 here.

Note. These answers come out as negative numbers in parentheses and in red since these are payments you make not payments you receive.