Five Siblings (one is Fran) live on a farm. Each must perform a chore (including milking a cow) on a specific day of the week (Mon-Fri). If each of them performs a certain task on a given day and at a specific time (either 5am, 6am, 7am, 8am, 9am), from the clues provided below can you determine which sibling performed which task at which time on which day?

**CLUES: (show/hide)**

Fran's mending fence day is neither Tuesday nor Thursday, and is completed earlier in the week than at least one other person.

The one who goes to market goes later in the week than Carl, and earlier in the morning than Nan, but later in the morning than Fran.

Adam does not plant the corn, or go to market, his chore is completed before 9am, but not before 6am on his assigned day of Monday.

No one performs a chore on Thursday at 7am.

Mike's chore is completed earlier in the day than at least 3 others, but later in the week than at least three others.

One man collects eggs, another man milks Bessie, the goat.

The milk is collected earlier in the week than the women who plants the corn, which is not planted before Wednesday.

The eggs must be collected at 7am, but never on Mondays or Fridays.

All the other chores must be complete before Mike goes to the market.
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(SEE PAGE 4 FOR STEP-BY-STEP SOLUTION)
Adam- Monday -8am-Milks bessie the goat.
Carl-Tuesday-7am-collects eggs.
Fran-Wednesday-5am-Mends the fences.
Nan-Thursday-9am -plant the corn.
Mike-Friday-6am-Market

step-by-step

Lets look at the first clue "Fran's mending fence day is neither Tuesday nor Thursday, and is completed earlier in the week than at least one other person."
The first part of this clue "...Fran ....mending fence day.....neither Tuesday nor Thursday" yields a solution [Fran-Mend] and elimination grid squares:

[Fran-Milk, Fran-Market, Fran-Corn, Fran-Eggs]
as well as [Fran-Tuesday, Mend-Tuesday, Fran-Thursday, Mend-Thursday] and [Adam-Mend, Carl-Mend, Nan-Mend, Mike-Mend]
Eliminate [Fran-Friday, Mend-Friday] since "... Fran's ... mending... is... earlier in the week than at least one other person."

"The one who goes to market goes later in the week than Carl, and earlier in the morning than Nan but, later in the morning than Fran."

Eliminate [Carl-Market, Nan-Market, Fran-Market], since all three of these people are compared to the "... one who goes to market..."
Eliminate [Market-Monday] since "... market...later in the week than Carl" and eliminate [Carl-Friday].

Eliminate [Market-9am, Nan-5am] since "... market...earlier in the morning than Nan"
Eliminate \([\text{Market-5am, Fran-8am, Fran-9am, Mend-8am, Mend-9am}]\) since "...market...later in the morning than Fran"

"Adam does not plant the corn, or go to market his chore is completed, before 9am but not before 6am on his assigned day of Monday."

Eliminate \([\text{Adam-Market, Adam-Corn, }]\), and note that leaves a solution for the person who goes to market, (by the process of elimination) must be Mike, so find square \([\text{Mike-Market}]\) and click until a 'green box' appears, (which, of course) yields the eliminations \([\text{Mike-Milk, Mike-Corn, Mike-Eggs}]\)

Returning to finish the clue for Adam:

(We are given) :

"...before 9am, but not before 6am, which results in the following eliminations :

\([\text{Adam-5am, Adam-6am, Adam-9am}]\)."

Finally to complete Adam's clue we have :

"...his assigned day of Monday"-- so click square \([\text{Adam-Monday}]\) until the 'green box' appears there.

Eliminate \([\text{Adam-Tuesday, Adam-Wednesday, Adam-Thursday, Adam-Friday}]\), as well as

\([\text{Carl-Monday, Fran-Monday, Nan-Monday, Mike-Monday}]\) and

\([\text{Market-Monday, Corn-Monday, Mend-Monday, 5-Monday, 6-Monday, 9-Monday}]\)

(these last eliminations are made because of the association Adam-Monday).

*NOTE*: The completion of this clue(if done correctly) uncovers a solution for Fran in the grid : 'Fran-Wednesday' (and by association of
Fran-Mend) \textbf{'Mend-Wednesday'}. \\
So locate these two grid squares[\textbf{Fran-Wednesday, Mend-Wednesday}] and click until both are loaded with 'green boxes', (which allows us to make these eliminations:


\textit{"No one performs a chore on \textbf{Thursday} at 7am."}

Eliminate [\textbf{7-Thursday}]

\textit{"Mike's chore is completed earlier in the day than at least 3 others ,but later in the week than at least three others ."}

NOTE: Mike's chore is \textbf{'Market'} (so keep that in mind for the following eliminations)

Mike-Market is " ...earlier ...day than at least 3 others \\
Eliminate [\textbf{Mike-7, Mike-8, Mike-9, Market-7, Market-8}]

*IMPORTANT* : These eliminations uncover a solution- [\textbf{Market-6}] and by association (of Mike-market) [\textbf{Mike-6}], so both squares should be filled with 'green boxes' and make the eliminations:

\[ \textbf{Mike-5, Carl-6, Nan-6, Fran-6} \] as well as \[ \textbf{Milk-6, Corn-6, Mend-6, Eggs-6, 6-Wed} \].

Mike-Market is " ...later ...week than at least 3 others \\
Eliminate [\textbf{Mike-Tuesday, Market-Tuesday}]

\textit{"One man collects eggs, another man milks Bessie, the goat ."}

Eliminate [\textbf{Nan-Eggs, Nan-Milk}] because the key here is \textbf{'MAN'}, and since Nan is not a man, we eliminate those squares, which of course leads to the solution: [\textbf{Nan-Corn}], (which in turn eliminates
The milk is collected earlier in the week than the woman who plants the corn which is not planted before Wednesday.

The first part of this clue allows us to eliminate [Milk-Fri], so that we can now focus on the second part of the clue. To begin with we now know this woman is Nan, thus we can make the eliminations [Nan-Tue, Corn-Tue] because "corn...is not..before Wednesday"

This means the only person left to perform chores on Tuesday is 'Carl' So we select [Carl-Tue] and eliminate [Carl-Thu].

The eggs must be collected at 7 am. , but never on mondays or fridays.

First locate [Eggs-7] and click until 'green', then make the eliminations: [Eggs-5, Eggs-6, Eggs-8, Eggs-9] as well as [Milk-7, Market-7,Corn-7, Mend-7].

Which leads to the logical conclusions [Mend-5, Fran-5, 5-Wed] and the eliminations [Carl-5, Fran-7, 5-Tue, 5-Thu, 5-Fri, 7-Wed]
The last part of the clue states "...Eggs...collected....never on...mondays or fridays", which allows us to make the following logical eliminations:

[Eggs-Mon, Eggs-Fri]. This will yield another solution : [Milk-Monday], which also means [Adam-Milk], because Adam-Mon.

Now the resultant eliminations are :[Adam-Eggs, Carl-Milk, Milk-Tue, Milk-Wed, Milk-Thu, Milk-Fri, Eggs-9]

Which, in turn, reveals still more solutions
[Carl-Eggs, Eggs-Tue, Milk-8, Adam-8, Monday-8,] and their resulting eliminations: [Adam-7, Carl-8, Nan-8, Tue, 8-Thu, 8-Fri, Eggs-Thu, Corn-8], and even more solutions: [Corn-9, Nan-9, Carl-7, 7-Tue ]

"All the other chores must be complete before Mike goes to the market."

In other words, Mike( and Market) are completed last(Friday).

Locate and click on [Mike-Fri, Market-Fri] until 'green boxes' are added to both , make your eliminations [Mike-Thu, Market-Thu].

Congratulations! Puzzle solved. To summarize:

Adam- Monday -8am-Milks bessie the goat.
Carl-Tuesday-7am-collects eggs.
Fran-Wednesday-5am-Mends the fences.
Nan-Thursday-9am-plant the corn.
Mike-Friday-6am-Market