Chapter 6.9: "Tossing Stones"

Towards the end of the main part of "Chapter 6.6", we examined a 'Progressive Pattern Set' which, when the individual 'Progressive Patterns' are laid out beneath one another in a chart, displays a sub-pattern which involves the Quantities of colored Numbers which are contained within each of the vertical columns of the chart. This chart (of this particular 'Progressive Pattern Set') is shown again below, with all of the Shocks which are involved in each of the individual 'Progressive Patterns' all highlighted in the standard color code. (The sub-pattern which is displayed by the row of non-highlighted Numbers which is oriented at the bottom of the chart involves an aggregated count of all of the individual steps which are involved in this nine-member 'Progressive Pattern Set' (excluding those of the 'No Change Progressive Pattern'), with this being an important clarification which will be explained as we progress.)

5308641975...
5308641975308641975...
5308641975...
5308641975308641975308641975308641975...
5308641975308641975308641975308641975308641975...
5308641975308641975...
5308641975308641975308641975308641975308641975308641975308641975...
5308641975308641975308641975308641975308641975308641975308641975308641975...

812232424220302130202100210020102002100020100100110000002000000110000001

The bottommost row of non-highlighted Numbers which is contained in the chart which is seen above contains an incomplete example of the sub-pattern which we will be working with throughout this sub-chapter. This sub-pattern is currently incomplete, in that the individual 'Progressive Patterns' which are contained in the chart are all carried out only until the end of their first iteration. We will examine a complete chart (in which all of the 'Progressive Patterns' are carried out to the same arbitrary length), along with the partially complete sub-pattern which it yields, a bit later in this sub-chapter. While this particular sub-pattern, be it incomplete or complete, qualifies as a form of 'Ripple Pattern' (and will be referred to as such throughout this sub-chapter), which is due to the fact that it displays concentric Ripples which resemble those which appear in a still body of water when it is disturbed (with the overall concept of 'Ripple Patterns' having been explained briefly in the endnotes of "Chapter 3.3").

Also, as was mentioned a moment ago, the row of non-highlighted Numbers which is oriented at the bottom of the chart which is seen above involves a running count of all of the steps which are involved in the various 'Progressive Patterns' which are contained in this particular 'Progressive Pattern Set'. (Though the 'No Change Progressive Pattern' is not included in this chart, as it acts as the separation between the Cycles of the 'Progressive Pattern Set', as has been explained previously.) This means that any chart which involves a nine-member 'Progressive Pattern Set' will yield the exact same 'Ripple Pattern' (since they would all involve the same Quantity of 'Progressive Patterns', all of which would be carried out to the same length, and all of which would involve the same Quantity of steps). Therefore, the specific nine-member 'Progressive Pattern Set' which is used to populate a complete chart, as well

as all of its qualities and characteristics, are completely irrelevant to the end result (this being an example of a complete 'Ripple Pattern').

Finally, we need to clarify that the 'Ripple Pattern' which is seen above is not complete, nor is the chart from which it is derived, and this is due to the fact that all of the 'Progressive Patterns' which are contained within the chart are carried out through only one iteration. In this incomplete form, this (or any) chart will yield an incomplete example of a 'Ripple Pattern'. Therefore, we will start by examining the incomplete 'Ripple Pattern' which is seen at the bottom of the chart which is seen on the previous page. Then, once we examine the Ripples which are contained within the incomplete 'Ripple Pattern', we will complete the chart (and therefore the 'Ripple Pattern'), in order to examine the Ripples which are contained within the complete 'Ripple Pattern'.

With all of that said, we will examine the incomplete 'Ripple Pattern' which was seen a moment ago (with this being the same 'Ripple Pattern' which ended the previous sub-chapter). This incomplete 'Ripple Pattern' is shown again below, without the chart of the 'Progressive Pattern Set' from which it is derived, as it is no longer needed for our current purposes.

81223242423151334140210021002010200210002010010011000000200000011000000001...

Above, we can see that this 'Ripple Pattern' is comprised mainly of 0's, the vast majority of which fall towards the right side of the pattern. These 0's arise due to the fact that this 'Ripple Pattern' is incomplete, in that the individual 'Progressive Patterns' which are contained in the 'Progressive Pattern Set' of which the chart is composed were all carried out only to their first point of repetition, as was mentioned a moment ago. This means that the vertical columns towards the right side of the chart only contain the new (first occurrence) steps which are involved in the longer 'Progressive Patterns', and not repetitions of the steps which are involved in the shorter 'Progressive Patterns'.

First, since we are already working with an incomplete 'Ripple Pattern', we will remove all of the 0's from the pattern, in order to get a basic look at the behavior of the individual Ripples, as is shown below. (The 0's are only 0's because we have not carried the smaller 'Repetition Patterns' out far enough yet. While this incompleteness also causes the Numbers which are oriented towards the right side of the pattern to be Lesser than those which are oriented towards the left side of the pattern.)

<div align="center">8122324242315133414212121221211112111</div>

Next, we will highlight the various Ripples which are contained within this (incomplete, modified) 'Ripple Pattern', as is shown below, with the Ripples highlighted in green, and the stones highlighted in red, with this being the color code which we will be using throughout this sub-chapter. (To clarify, the green Ripples are the instances of concentric Matching Numbers which surround each of the red stones, with this being a concept which will be explained as we progress.)

<div align="center">812232424242315133414212121221211112111</div>

Next, we will list each of the individual Ripples which are seen above, one beneath the other (with all of the stones centered), starting with the rightmost (least complete) Ripple, and working our way back to the leftmost (most complete) Ripple. Also, the Matching sides of the Ripples (these being the concentrically Matching green Numbers which are oriented to the left and right of the red center

Numbers) will require occasional Shocks in order to maintain their concentric Matching. This will be addressed in a moment, though for now, the Lesser of the two non-Matching Numbers will be highlighted arbitrarily in blue (without having its value altered).

<div align="center">

1112111
21221211112
212121221
34142
242423151334142
12232424231

</div>

Above, we see the six stones (these being the red Numbers) which have been dropped into the pond (this being the overall 'Ripple Pattern'), along with the various Ripples which these stones cause in the water (with these Ripples involving the various instances of concentrically Matching green Numbers which emanate from the impacts of the stones). (These Ripples are similar to those which would be yielded by tossing a variety of differently sized stones into a still body of water, in that the stones would cause a variety of similar though unique ripples in the water upon impact.) First (or technically last), the far-right stone is the red 2, which is shown at the top of the list. This stone causes a very smooth, relatively short-lived Ripple, as is indicated by the instances of Matching green 1's which work their way concentrically outwards from the point of impact (this being the center of the Ripple). Next, the stone which impacts to the left of the first stone is another red 2, which is listed directly below the first red 2. This stone causes a slightly longer-lived Ripple, one which involves an assortment of concentrically Matching 1's and 2's. This Ripple also involves two Shocks, which implies that there is an interference of some kind being displayed here. (This interference is due to the Neighboring Ripples, as will be explained in a moment.) Then the next stone is another red 2, which causes a Ripple which is similar to that of the previous stone, with this Ripple also involving two Shocks. Then the next stone is the red 1, which is the Least of all of these stones (in terms of value). This stone causes the shortest-lived of all of these Ripples, which involves only one Shock. Next is the red 5, which is the Greatest of all of these stones. This stone causes the longest-lived of all of these Ripples, which again involves two Shocks. Finally, the next stone is the red 4, which causes a moderately long-lived Ripple, which involves two Shocks.

The individual Ripples which are seen in the chart which is shown above are displayed separately due to the fact that all of the Neighboring Ripples eventually merge with one another, with this merging of the Ripples causing a form of interference pattern (which is responsible for the Shocks), as is shown below, with these same Ripples all aligned in their standard orientation, and shown above a horizontal example of the overall 'Ripple Pattern', for clarity.

<div align="center">

1112111
21221211112
212121221
34142
242423151334142
12232424231

8122324242315133414212121221211112111

</div>

Above, with these same stones shown in their standard alignment, we can see that each of these stones shares its Ripples with its Neighboring stones, with all of these Neighboring Ripples eventually merging together in the center (respectively). This merging of Ripples creates the interference pattern which is contained within the overall 'Ripple Pattern', with this interference pattern being similar to that which is caused by raindrops in a puddle (or that which is seen in holographic film). For example, the Ripple which is oriented to the right side of the red 4 merges with the Ripple which is oriented to the left side of the red 5, with the blue (Shocked) 2 which is oriented in the center of these two Ripples being a result of the interference which is displayed between these two individual Neighboring Ripples.

Next, we will complete the incomplete chart which was seen at the beginning of this sub-chapter. This means that we will now carry all of these individual 'Progressive Patterns' out to the same arbitrary Quantity of digits (by simply adding more iterations of the shorter 'Progressive Patterns'), as is shown below, with the steps again counted vertically and listed at the bottom of the chart. (The horizontal row of non-highlighted Numbers which is oriented at the bottom of the chart contains a representative sample of this complete 'Ripple Pattern', in that that the complete 'Ripple Pattern' is still only partially represented, as it is not carried out to its first point of repetition. This is an important clarification which will be explained as we progress.)

5308641975308641975308641975308641975308641975308641975308641975308641975...
5308641975308641975308641975308641975308641975308641975308641975308641975...
5308641975308641975308641975308641975308641975308641975308641975308641975...
5308641975308641975308641975308641975308641975308641975308641975308641975...
5308641975308641975308641975308641975308641975308641975308641975308641975...
5308641975308641975308641975308641975308641975308641975308641975308641975...
5308641975308641975308641975308641975308641975308641975308641975308641975...
5308641975308641975308641975308641975308641975308641975308641975308641975...

812232424231513341414321622241514223512251513321623231425221612342413 2416...

Above, at the bottom of the chart, we see the complete 'Ripple Pattern' (which is only partially represented, as was mentioned a moment ago). As was mentioned at the start of this sub-chapter, this 'Ripple Pattern' is simply an aggregated count of all of the steps which are involved in the 'Progressive Patterns' which are contained in this nine-member 'Progressive Pattern Set' (excluding the 'No Change Progressive Pattern'). This means that this particular 'Ripple Pattern' can be yielded completely independent of any 'Progressive Pattern Set', simply by counting generic steps, as is explained below.

We will start with just a 'One-Step +1 Pattern', which (obviously) involves a '+1 Addition Function' on every step. This 'One-Step +1 Pattern' is shown below, carried out for an arbitrarily Quantity of thirty digits. (This is not a traditional 'Progressive Pattern', in that each of these '+1 Addition Functions' is being Added to an assumed 0.)

111111111111111111111111111111...

Above, we have Added the 1 to an assumed 0 at every step, with these Functions comprising a simple, generic 'One-Step +1 Pattern' (which in this case is carried out arbitrarily to thirty digits).

Next, if we overlay a 'Two-Step +1 Pattern' on top of this 'One-Step +1 Pattern', this will yield the new pattern which is shown below. (To clarify, this 'Two-Step +1 Pattern' again involves individual '+1

Addition Functions', which in this case are being Added to an existing 1 on every second step, with these '+1 Addition Functions' beginning on the first step.)

212121212121212121212121212121...

Next, if we overlay a 'Three-Step +1 Pattern' on top of the previous two patterns, this will yield the new pattern which is shown below.

312221312221312221312221312221...

At this point, we can see that what we are actually doing here is starting out with a row of 0's, and then Adding the 1 to every one of these Numbers, then going back and Adding the 1 to every second Number in the row, then going back and Adding the 1 to every third Number in the row, then to every fourth Number in the row (and so on), all the way through to Adding the 1 to every eighth Number in the row. Eventually (when carried out through eight steps), this will result in the complete (though only partially represented) 'Ripple Pattern' which is shown below. (To clarify, this particular 'Ripple Pattern' is only partially represented, in that it is not to carried out its first point of repetition).

812232424231513341414321622241...

Above, we see a thirty-digit representative sample of this complete 'Ripple Pattern'. In the next section of this sub-chapter, we will examine the characteristics of, and interactions which occur between, the individual Ripples which are contained within a seventy-one-digit representative sample of this complete 'Ripple Pattern' (which we have just determined can be yielded independent of any 'Progressive Pattern Set', simply by counting generic steps). (While the intermediary steps which are involved in the yielding of this complete 'Ripple Pattern' also display interesting behaviors and sub-patterns, a few of which will be examined in the endnotes of this sub-chapter.)

****

Next, we will examine a representative sample of the complete 'Ripple Pattern' which was seen in the previous section. A portion of this representative sample is shown below, with a new selection of stones highlighted arbitrarily in red, and the Ripples which these fourteen stones cause highlighted arbitrarily in green.

812232424231513341414321622241514223512251513321623231425221612342413 24...

Above, we can see that this representative sample involves a new selection of stones, in that these stones are different from those which were seen in the representative sample which was examined in the previous section (that of the incomplete 'Repetition Pattern'). Though it should be noted at this point that all of these choices of stones are somewhat arbitrary, with this being an important clarification which will be explained towards the end of this section. Also, this time around, we are working with a Greater quantity of stones, with this crowding of the stones causing the Ripples to merge together more quickly. Therefore, in order to get a better look at these Ripples, we will list each of the Ripples individually, as is shown and explained below.

First, we will examine the leftmost of the Ripples which are contained within this complete 'Ripple Pattern', which is shown below (with none of the other stones or Ripples which are contained within the 'Ripple Pattern' highlighted). (Throughout these first few examples, we will be ignoring the 'Shocks Of 1' which are involved in the various instances of concentrically Matching Numbers which comprise the Ripples. This means that all of the concentric pairs of green Numbers will either display Matching between one another, or be separated by 1, and the Ripples will be considered to end with the first Shock of 2 or more.)

8122324242315133414143216222415142235122515133216232314252216123424 1324...

Above, we can see that this Ripple persists concentrically for four digits, at which point, the concentric Numbers (these being the 2 and the 5) would require a 'Shock Of 3' in order to display Matching between one another.

Next, we will examine a chart which contains all of these individual Ripples, listed one beneath the other, in order to determine how far the concentric Ripples are carried out for each of the stones. This chart is shown below, with all of the horizontal rows containing the same overall 'Ripple Pattern', with each of the rows being used to highlight a different individual Ripple, in order to keep the Ripples from interfering with one another. (Again, each of these individual Ripples stops at the first Shock of 2 or more.)

81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
81223242423151334141432162224151422351225151332162323142522161234241324161233242522

Above, we can see that the Ripples which are caused by the Lesser of the stones are relatively short-lived, while those which are caused by the Greater of the stones carry on quite a bit further (with the Ripple which is caused by the bottommost 6 carrying on well beyond the concentric ends of this representative sample).

Next, in order to allow for an easier comparison of these fourteen Ripples, we will alter this chart to center all of the stones (by Shifting each of the individual 'Ripple Patterns'), as is shown below. (To clarify, the chart which is shown below is the same chart as that which is seen above, only with all of the stones aligned in the center.)

8122324242315133414143216222415142235122515133216
812232424231513341414321622241514223512251513321623231
812232424231513341414321622241514223512251513321623231425221
812232424231513341414321622241514223512251513321623231425221612342
812232424231513341414321622241514223512251513321623231425221612342413241
8122324242315133414143216222415142235122515133216232314252216123424132416123
81223242423151334141432162224151422351225151332162323142522161234241324161233242
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
32424231513341414321622241514223512251513321623231425221612342413241612332425221622
24231513341414321622241514223512251513321623231425221612342413241612332425221622241
31513341414321622241514223512251513321623231425221612342413241612332425221622241523
33414143216222415142235122515133216232314252216123424132416123324252216222415232226
143216222415142235122515133216232314252216123424132416123324252216222415232226613241
22415142235122515133216232314252216123424132416123324252216222415232226132414144215

For the remainder of this section, we will be working with the centered alignment which is seen above, as this chart will allow for a better comparison of the individual Ripples. (Also, it should be noted that even with this centered alignment, the Ripple of the bottommost 6 still extends well beyond the ends of this representative sample).

Next, we will extend all of these Ripples by including the Shocks of 2 and 3 (which will be highlighted arbitrarily in blue and purple, respectively), as is shown below. (To clarify, in relation to all of these Shocks, the highlighting is not meant to identify which specific Number is being Shocked, only that the highlighted pair of Numbers involves a separation. This is due to the fact that in these situations, we can only determine the size of the Shock, and not the Charge of the Shock (and therefore which of the two Numbers the Shock should be applied to), as without some established pattern to reference (which we do not have here), there is no way for us to determine which of the two Numbers involves the correct value.)

8122324242315133414143216222415142235122515133216
812232424231513341414321622241514223512251513321623231
812232424231513341414321622241514223512251513321623231425221
812232424231513341414321622241514223512251513321623231425221612342
812232424231513341414321622241514223512251513321623231425221612342413241
8122324242315133414143216222415142235122515133216232314252216123424132416123
81223242423151334141432162224151422351225151332162323142522161234241324161233242
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
32424231513341414321622241514223512251513321623231425221612342413241612332425221622
24231513341414321622241514223512251513321623231425221612342413241612332425221622241
31513341414321622241514223512251513321623231425221612342413241612332425221622241523
33414143216222415142235122515133216232314252216123424132416123324252216222415232226
143216222415142235122515133216232314252216123424132416123324252216222415232226613241
22415142235122515133216232314252216123424132416123324252216222415232226132414144215

Above, we can see that all fourteen of these Ripples have been extended by the inclusion of the Shocks of 2 and 3. Also, we can see that the majority of these Shocks of 2 and 3 are contained within the

Ripples which are caused by the Lesser of the stones, which indicates that the impacts of these Lesser stones involve less energy, with this being a concept which will be explained towards the end of this sub-chapter.

Next, we will indicate all of the instances of concentrically Matching Numbers which are contained within each of the Ripples in non-highlighted black, as is shown below (with all of the extraneous Numbers removed from the chart). (In this chart, the 'Shocks Of 1' are all highlighted in green, the 'Shocks Of 2' are all highlighted in blue, and the 'Shocks Of 3' are all highlighted in purple, while the Matching Numbers are all shown in non-highlighted black, with this being the arbitrary color code which we will be using (for the most part) throughout the remainder of this sub-chapter.)

$$1223242423151$$
$$8122324242315133414143216$$
$$81223242423151334141432162224151422235$$
$$8122324242315133414143216222415142235122515133216$$
$$8122324242315133414143216222415142235122515133216232314252216$$
$$12232424231513341414321622241514223512251513321623231425221612 34241$$
$$12232424231513341414321622241514223512251513321623231425221612 3424132416123$$
$$3512251513321$$
$$324242315133414143216222415142235122515133216232314252216123424132416123324252216222$$
$$242315133414143216222415142235122515133216232314252216123424132416123324252216222 41$$
$$3151334141432162224151422351225151332162323142522161234241324161233242522162224 1523$$
$$2323142522161$$
$$1432162224151422351225151332162323142522161234241324161233242522162224152322261 3241$$
$$342413241$$

The chart which is seen above will be seen again towards the end of this sub-chapter (where it will involve an alternate form of highlighting). In the meantime, we will examine a series of charts which involve the instances of concentrically Matching Numbers and the various instances of Shocks which are contained within these Ripples (individually), all of which are shown and explained below.

Though before we progress any further, it should be briefly noted that all of these individual Ripples stop at the first Shock of 4 or Greater. This is due to the fact that not counting the Shocks of 4, 5, and 6 allows us to keep a few of the smaller Ripples in check. (We will extend these fourteen Ripples further by including the Shocks of 4, 5, and 6 in the next section of this sub-chapter.)

Next, we will examine a chart which involves only the instances of concentrically Matching Numbers which are contained within these fourteen Ripples. This chart is shown below, with all of the Shocked Numbers removed, and all of the instances of concentrically Matching Numbers shown in non-highlighted black.

```
                          1   3242423   1
                    12      4 4 31513 4 4      21
               22        42    1 3414143 1      24        22
           12 3      2 15     41 14 2 6 2 41 14    51 2      3 21
        122 24    23   1 3 1 1    21    224151422   12   1 1 321   32   42 221
      1 2           5            2           1 2 1            2            5            2 1
    2    42            1      1 2 2 1        5 2 5      1 2 2 1        1            24    2
                                            515
  2    2      33 1 14   1 2    1 1 2    1 2    1 3 1    2 1    2 1 1    2 1  41 1 33    2    2
  42    1      4  3216  2 1   4 2  1225    13     6    31   5221   2 4   1 2  6123   4     1    24
  3 51        1      2    1 142       1 1       323         1 1         241 1   2     1       15 3
                                             2
  14   16222  51422  1225    33216  23142  21612  24132  61233    5221  22415  22261  41
                                     42  1  24
```
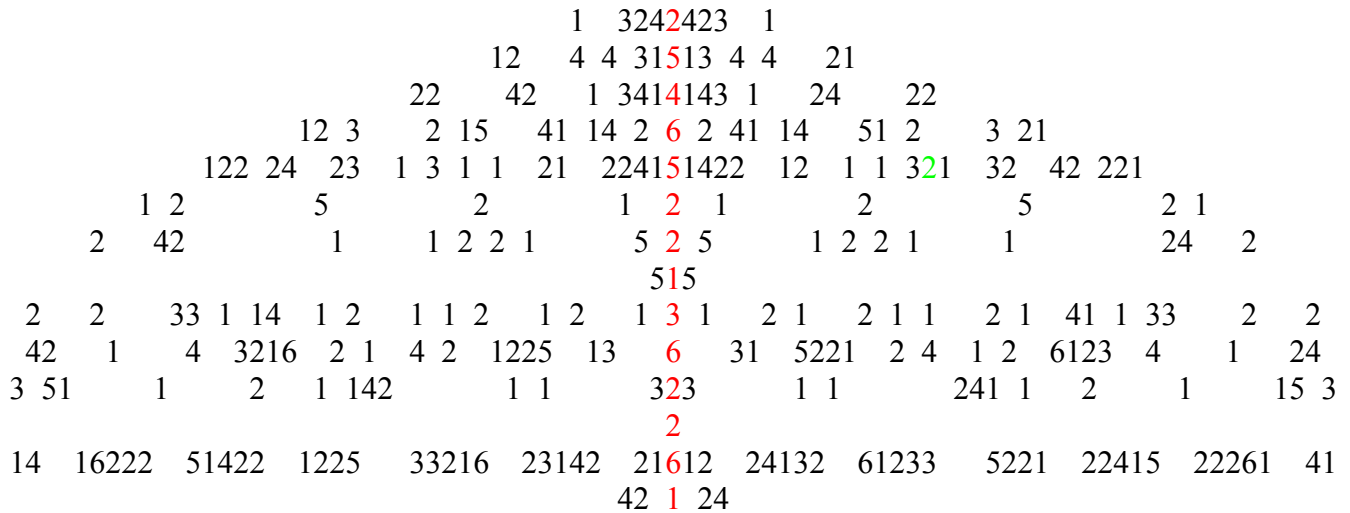
Above, we can see that the majority of the instances of concentrically Matching Numbers occur within the Ripples which are caused by the Greater of the stones (especially those which are caused by the 6's), while the Ripples which are caused by the Lesser of the stones do not involve as many of these instances of concentrically Matching Numbers. This again has to do with the fact that the impacts of the Greater stones involve more energy than those of the Lesser stones, as will be explained a bit later in this section (after we examine the various instances of Shocks which are contained within these Ripples).

This same chart is shown again below, this time with all of the instances of concentrically Matching Numbers **redded out**. (To clarify, the term *redded out* indicates that the red highlighting is overlaid on top of (or technically behind) the black Numbers. This form of highlighting was seen briefly in the endnotes of "Chapter 6.6", and will be used (for the most part) throughout the remainder of this sub-chapter, as it more clearly indicates this Ripple behavior.)

```
                          1   3242423   1
                    12      4 4 31513 4 4      21
               22        42    1 3414143 1      24        22
           12 3      2 15     41 14 2 6 2 41 14    51 2      3 21
        122 24    23   1 3 1 1    21    224151422   12   1 1 3 1   32   42 221
      1 2           5            2           1 2 1            2            5            2 1
    2    42            1      1 2 2 1        5 2 5      1 2 2 1        1            24    2
                                            515
  2    2      33 1 14   1 2    1 1 2    1 2    1 3 1    2 1    2 1 1    2 1  41 1 33    2    2
  42    1      4  3216  2 1   4 2  1225    13     6    31   5221   2 4   1 2  6123   4     1    24
  3 51        1      2    1 142       1 1       323         1 1         241 1   2     1       15 3
                                             2
  14   16222  51422  1225    33216  23142  21612  24132  61233    5221  22415  22261  41
                                     42  1  24
```
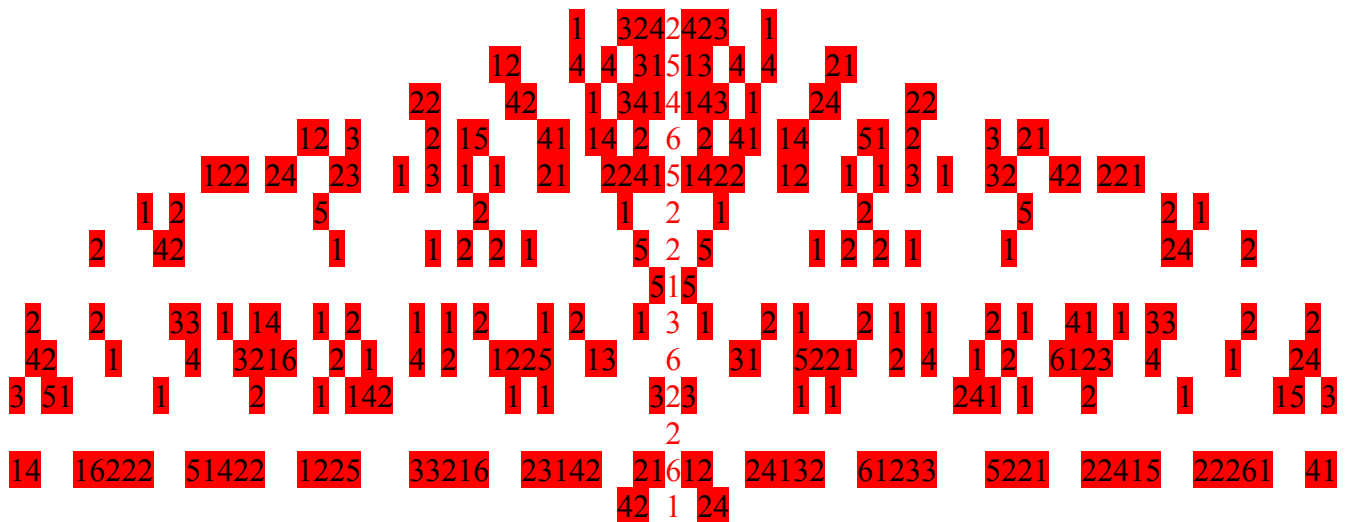
The chart which is seen above gives us a clearer look at the various instances of concentrically Matching Numbers which are contained within each of these Ripples.

Next, we will examine a chart which involves all of the 'Shocks Of 1' which are involved in these Ripples, which is shown below, with the 'Shocks Of 1' all **greened out**, and with the instances of concentrically Matching Numbers and Shocks of 2 and 3 all removed from the chart.

```
                          2    2    1
                     232 2 2    5    3 1 143
                   3242    315 3    4    2 622    1514
              2 2424 3    33  4   3 162 2   5   22    2 5151 3
               24   15 3 4 4 43   62    5    35   25 5 3 2 62   31
            32 2 231 13 4141    2 241   42235 251 1    2323 42 221 1 34
         2 2  42315 3    143    2    42   122   13    3    252    2 42413 1 1
                             22 1 13
      3 2 151    32   2 5   35 2 15 332 62 3 42   6 3    32    242 1 2
      2 315 3341 14   2 4 51 2 5   15 3216232 42   6 3 24 3 1   32 2522 622 1
       1 33 1   3 1 22 5   2 51 2 5 33 1 2 2 1 2 22 6 3 24 3  6 33 2 2  2 24 2
                           2 231425221 1
       32    41    35    151    23    52 6 34    41    242    62    23    32
                             413
```
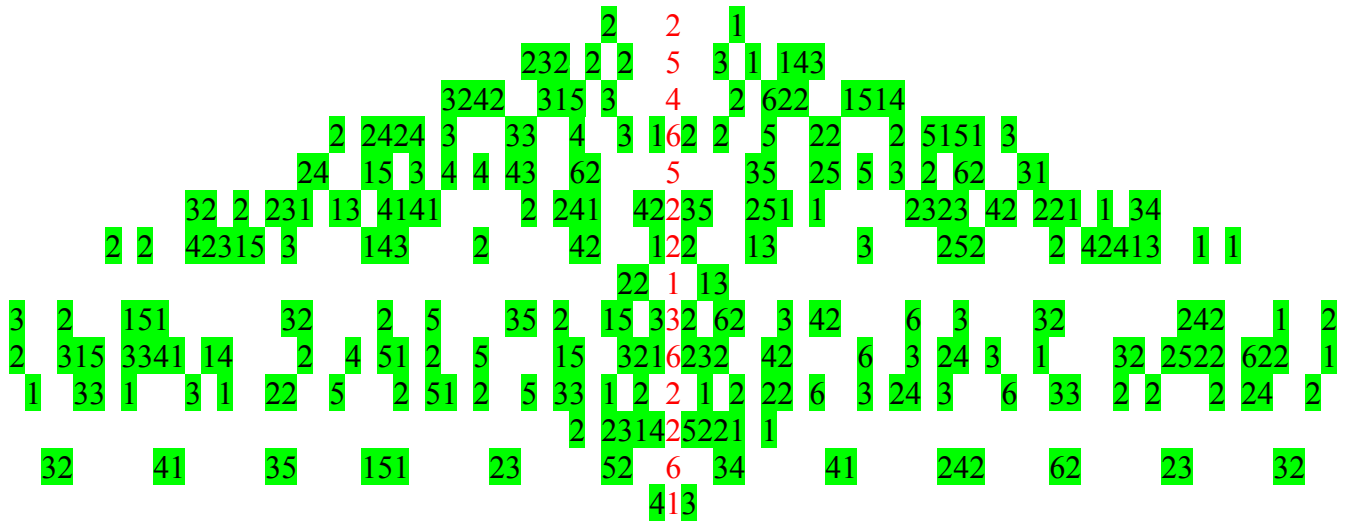
Above, we can see that the 'Shocks Of 1' are ubiquitous throughout these Ripples. These Shocks (of all sizes) are an inherent quality of these Ripples, and are caused by the interference of the Ripples which are caused by the Neighboring stones, as was mentioned in the previous section, and as will be explained more thoroughly towards the end of this section.

Next, still working with this same chart of the 'Shocks Of 1' (only without the overlayed highlighting), we will highlight the Greater of the Numbers which are involved in each of the concentric pairs of Shocked Numbers in green (while the Lesser of the Numbers will be shown in non-highlighted black), as is shown below.

```
                          2    2    1
                     232 2 2    5    3 1 143
                   3242    315 3    4    2 622    1514
              2 2424 3    33  4   3 162 2   5   22    2 5151 3
               24   15 3 4 4 43   62    5    35   25 5 3 2 62   31
            32 2 231 13 4141    2 241   42235 251 1    2323 42 221 1 34
         2 2  42315 3    143    2    42   122   13    3    252    2 42413 1 1
                             22 1 13
      3 2 151    32   2 5   35 2 15 332 62 3 42   6 3    32    242 1 2
      2 315 3341 14   2 4 51 2 5   15 3216232 42   6 3 24 3 1   32 2522 622 1
       1 33 1   3 1 22 5   2 51 2 5 33 1 2 2 1 2 22 6 3 24 3  6 33 2 2  2 24 2
                           2 231425221 1
       32    41    35    151    23    52 6 34    41    242    62    23    32
                             413
```
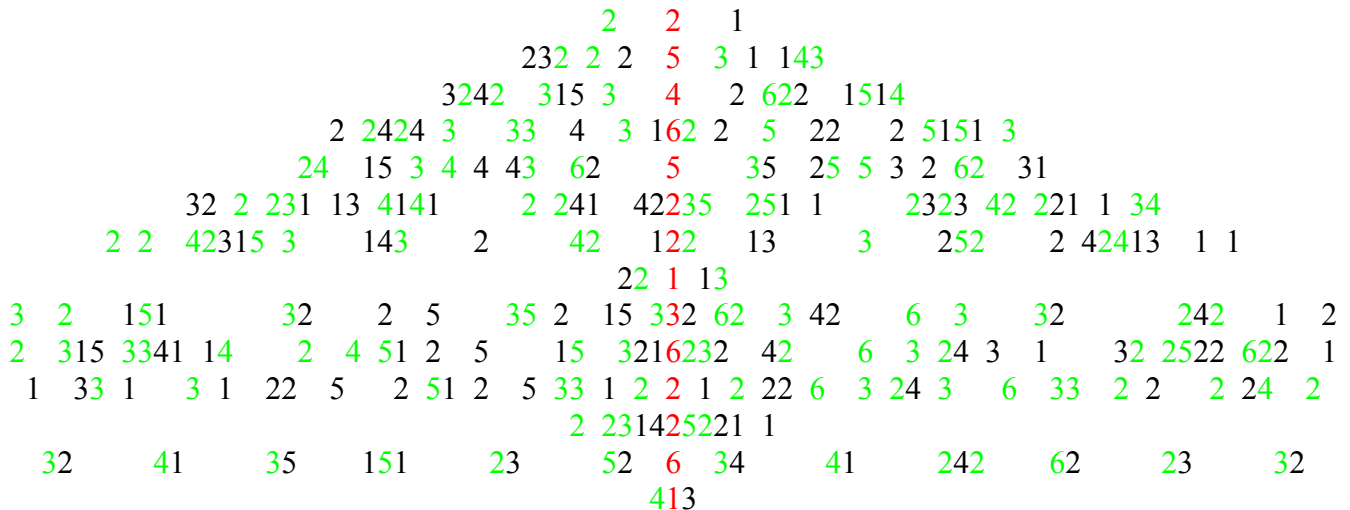
Above, we can see that there are a total of one hundred and forty-five 'Shocks Of 1' contained within this chart, with there being seventy green Numbers on the left side of the chart (along with seventy-five black Numbers), and seventy-five green Numbers on the right side side of the chart (along with seventy black Numbers). These totals indicate that the distribution of the Greater of the concentric Numbers is close to even between the two sides of the chart.

Next, we will examine a similar chart which exclusively involves the 'Shocks Of 2' which are involved in these Ripples, which is shown below, with the 'Shocks Of 2' all **blued out**.

```
                              2
              8               5               6
        1                     4         3
     8          1             6      3               6
  8  3               43  1    5    3 16    1      5  6
 2  4 4    3              4   2             6 2      4
1      1 34 4    2     4 1  3 2  1   3 6  4   2 61 3        3
                    3 1    1   3 1
4 4 3    4 4   6 2 4   4        3    3     2  2 4 4   6 2   5 2 6
            2         3         6            1      4
  4 4 4  6   4     3 2      6   2  4         4 1   2   4  2 6 2
                              2
                              6
                          3   1   1
```
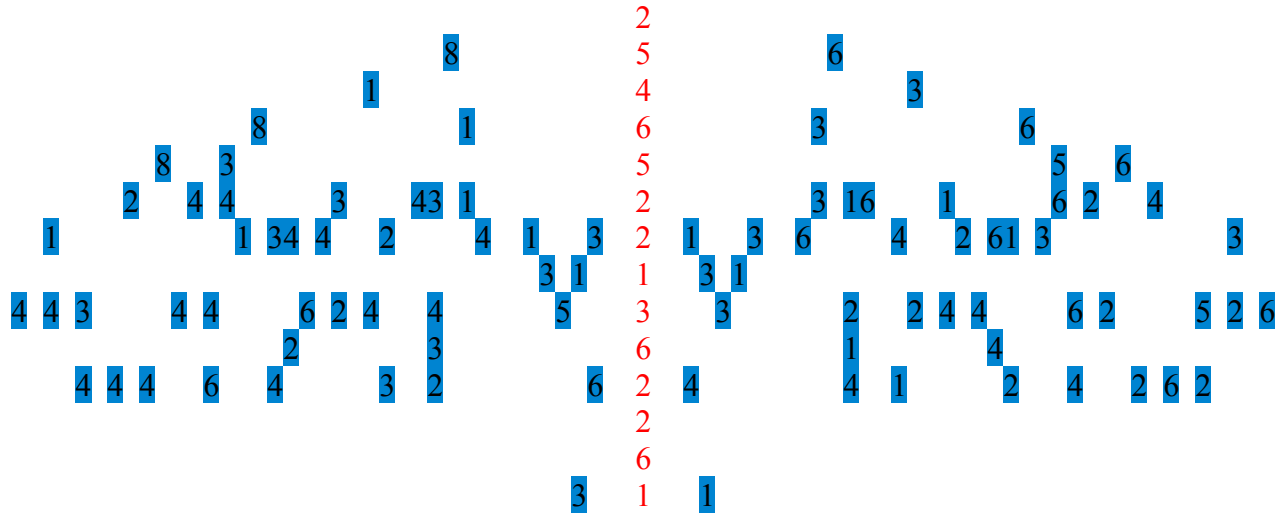
Above, we can see that while a few of the 'Shocks Of 2' occur within the Ripples which are caused by the Greater of the stones, the majority of the 'Shocks Of 2' occur within the Ripples which are caused by the Lesser of the stones. The Ripples which are caused by the Greater of the stones do not involve as many of these 'Shocks Of 2' due to the fact that the Greater stones, by virtue of their size (value), are impacting the water (pattern) with more energy than the Lesser stones, and as such, their Ripples are subject to less of this strong interference. (This behavior will also be seen in relation to the 'Shocks Of 3', as will be seen a moment.) Also, we can see that the majority of these 'Shocks Of 2' are oriented towards the outer edges of the Ripples (while the 'Shocks Of 3' will display somewhat of an inverse behavior, as will be seen in a moment).

Next, still working with this same chart of the 'Shocks Of 2', we will highlight the Greater of the Numbers which are involved in each of the concentric pairs of Shocked Numbers in green (while the Lesser of the Numbers will be shown in non-highlighted black), as is shown below.

```
                              2
              8               5               6
        1                     4         3
     8          1             6      3               6
  8  3               43  1    5    3 16    1      5  6
 2  4 4    3              4   2             6 2      4
1      1 34 4    2     4 1  3 2  1   3 6  4   2 61 3        3
                    3 1    1   3 1
4 4 3    4 4   6 2 4   4        3    3     2  2 4 4   6 2   5 2 6
            2         3         6            1      4
  4 4 4  6   4     3 2      6   2  4         4 1   2   4  2 6 2
                              2
                              6
                          3   1   1
```
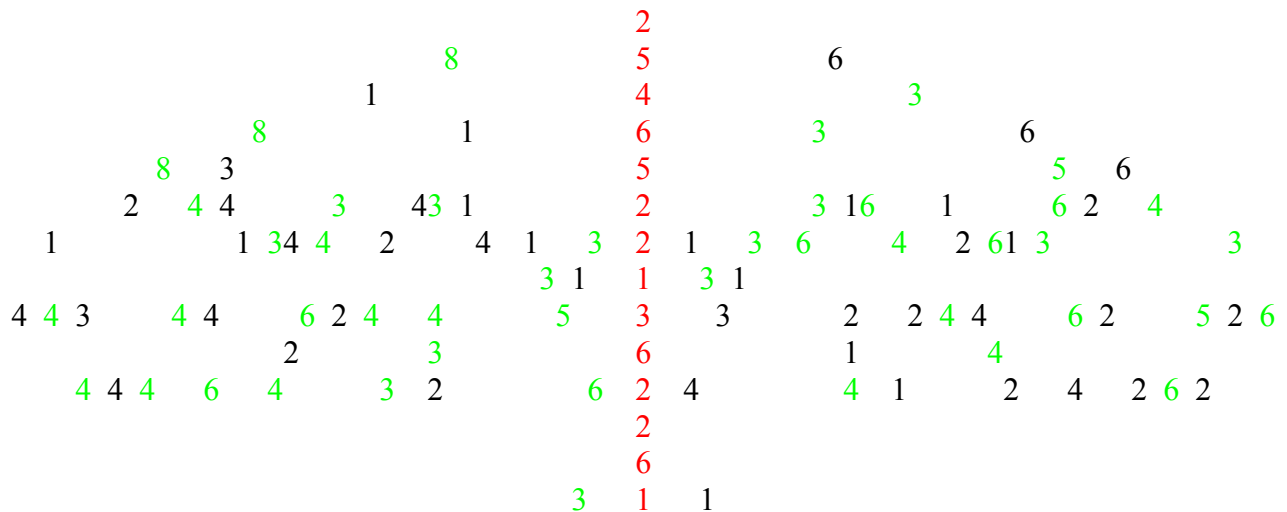
Above, we can see that there are a total of forty-five 'Shocks of 2' contained within this chart, with there being twenty-four green Numbers on the left side of the chart (along with twenty-one black Numbers), and twenty-one green Numbers on the right side side of the chart (along with twenty-four black Numbers). These totals again indicate that the distribution of the Greater of the concentric Numbers is close to even between the two sides of the chart, as was the case in relation to the 'Shocks Of 1' which were examined a moment ago.

Next, we will examine a similar chart which exclusively involves the 'Shocks Of 3' which are involved in these Ripples, which is shown below, with the 'Shocks Of 3' all **purpled out**.
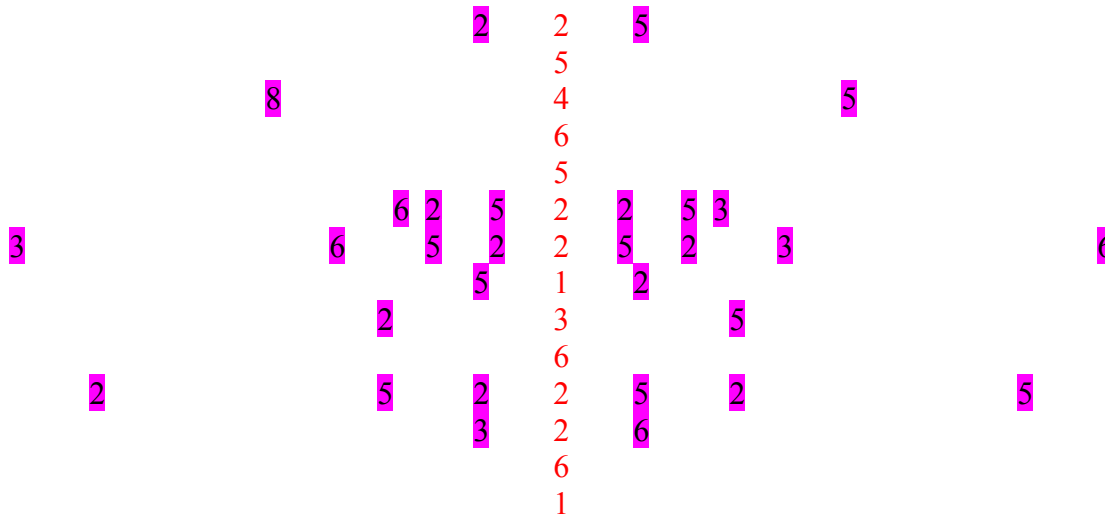
Above, we can see that the 'Shocks Of 3' occur exclusively within the Ripples which are caused by the Lesser of the stones, with none of these Shocks occurring within the Ripples which are caused by the 5's or the 6's, and only one of them occurring within the Ripple which is caused by the 4. (While all except for one of the Ripples which are caused by the 1's, the 2's, and the 3 involve at least one of these 'Shocks Of 3'.) Also, the vast majority of these 'Shocks Of 3' are oriented towards the center of the Ripples, with this behavior displaying Mirroring in relation to that which is displayed by the 'Shocks Of 2', whose orientations are (for the most part) towards the outer edges of the Ripples, as was seen a moment ago. Though as was the case in relation to the 'Shocks Of 2', the Ripples which are caused by the Greater of the stones do not involve as many of these 'Shocks Of 3' (as was just mentioned). This behavior is due to the Greater values of the stones, which increases the energy of their impacts, and therefore minimizes any strong interference within their Ripples. (To clarify, the term *strong interference* refers to any Shocks which are Greater than 1, while 'Shocks Of 1' are considered to be a form of weak interference.)

Next, still working with this same chart of the 'Shocks Of 3', we will highlight the Greater of the Numbers which are involved in each of the concentric pairs of Shocked Numbers in green (while the Lesser of the Numbers will be shown in non-highlighted black), as is shown below.

2   2   5

5

8   4   5

6

5

6 2   5   2   2   5 3

3   6   5   2   2   5   2   3   6

5   2   1   2

2   3   5

6

2   5   2   2   5   2   5

3   2   6

6

1
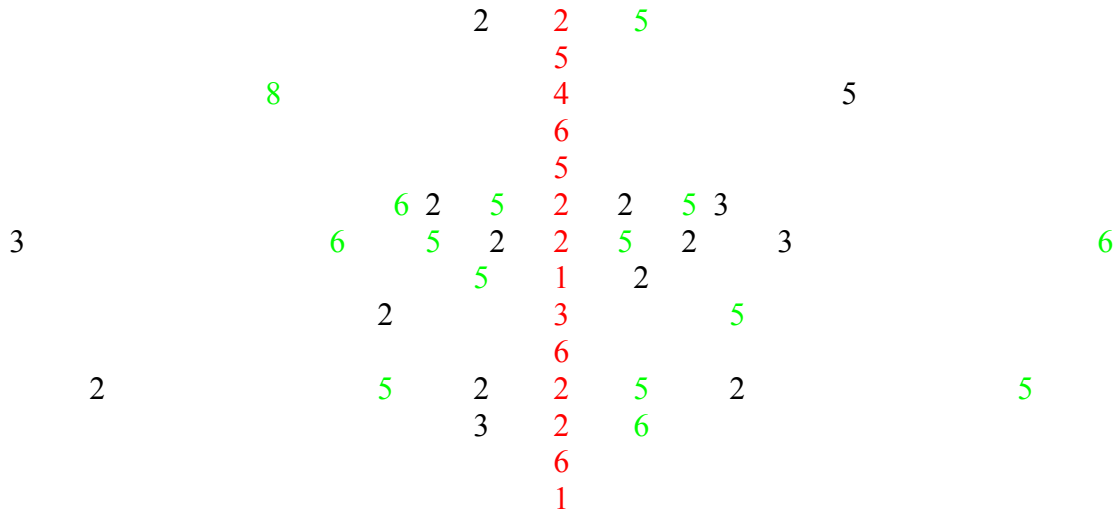
Above, we can see that there are a total of fifteen 'Shocks Of 3' contained within this chart, with there being seven green Numbers on the left side of the chart (along with eight black Numbers), and eight green Numbers on the right side side of the chart (along with seven black Numbers). These totals once again indicate that the distribution of the Greater of the concentric Numbers is close to even between the two sides of the chart, as was the case in relation to the 'Shocks Of 1' and the 'Shocks Of 2'.

Next, we will examine a chart which involves all of the Shocks of 1, 2, and 3 which are involved in these Ripples, as well as the instances of concentrically Matching Numbers, as is shown below. (In this chart, the 'Shocks Of 1' are all **greened out**, the 'Shocks Of 2' are all **blued out**, the 'Shocks Of 3' are all **purpled out**, and the instances of concentrically Matching Numbers are all **blacked out**. While in this example (as well as the next), the highlighting obscures the individual Numbers which are involved in each of the Ripples.)
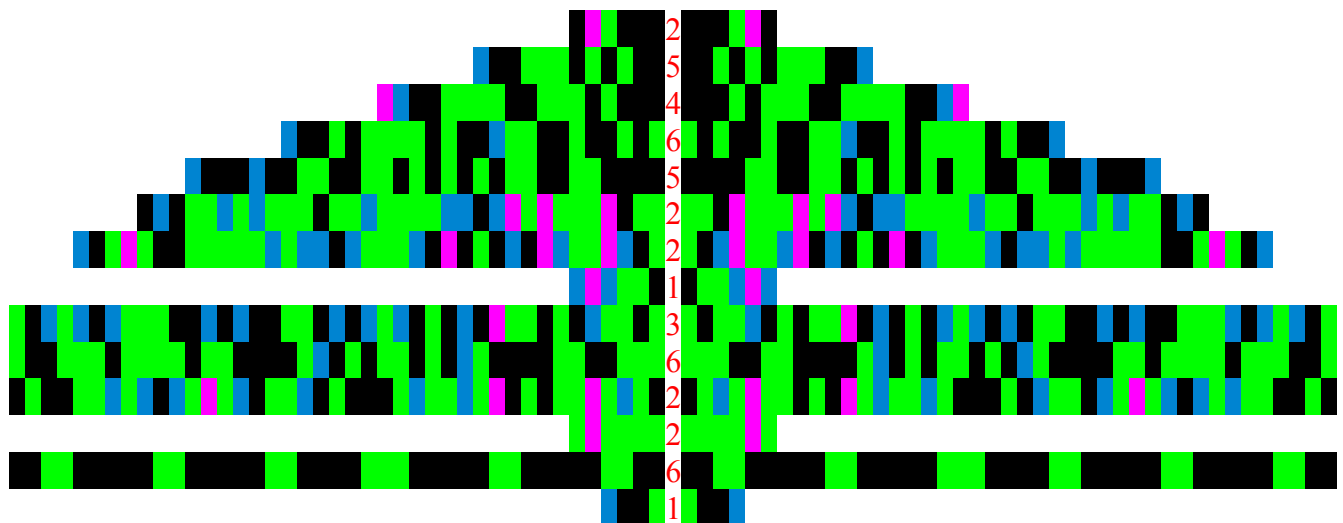
Above, we see the aggregated behavior of all of the Shocks of 1, 2, and 3 which are involved in these Ripples, as well as that of the instances of concentrically Matching Numbers, all of which was explained earlier.

Next, we will realign this same chart back into its standard alignment, as is shown below, with a representative sample of this complete 'Ripple Pattern' shown at the bottom of the chart, in order to help illustrate the alignment of the stones.

812232424231513341414321622241514223512251513321623231425221612342413241512332425221622241523222613241
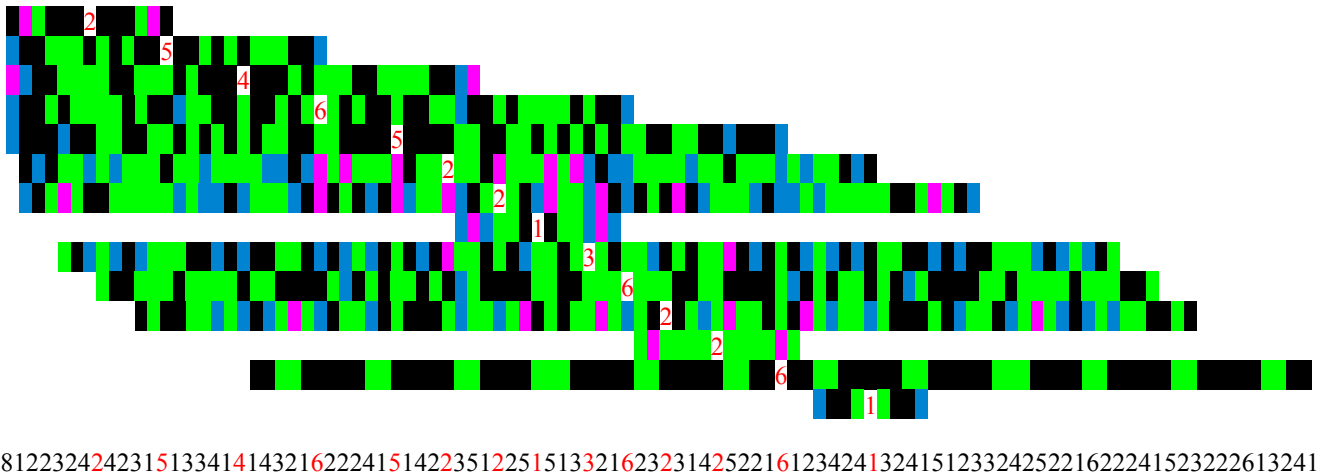
Above, we see a chart which involves the aggregated occurrences of all of the Shocks of 1, 2, and 3 which are involved in each of these Ripples, as well as the instances of concentrically Matching Numbers, which together yield a representation of a small percentage of the overall interference pattern which is contained within this complete 'Ripple Pattern'. This overall interference pattern, along with the Ripples, the Shocks, and the concepts of the mass and (to a lesser extent) the energy of the stones is all explained below.

The behaviors which have been seen throughout this section indicate that the Greater of the stones, due to their Greater mass (value, or Quality), are impacting the water (pattern) with more energy, which is causing Ripples which are stronger, and are therefore not as immediately susceptible to strong interference from their Neighboring Ripples (which are usually weaker). While the Lesser of the stones, due to their Lesser mass, are impacting the water with less energy, and are therefore causing weaker Ripples, which are more immediately interfered with by their Neighboring Ripples (which are usually stronger). Also, the Ripples which are caused by the Lesser of the stones contain the majority of the Greater of the Shocks (these being the Shocks of 2 and 3), with this again being indicative of the fact that the Ripples which are caused by the Lesser of the stones are more susceptible to strong interference than those which are caused by the Greater of the stones. (To clarify, the 'Shocks Of 1' are considered to be a form of weak interference, with this weak interference being present in all of these Ripples, regardless of the size of the stone which caused them. While the Shocks of 2 or more are considered to be forms of strong interference, with these forms of strong interference only being present in the (weaker) Ripples which are caused by the Lesser of the stones.)

Throughout this sub-chapter, this interference has been indicated by Shocks, which are simply a jostling of the Numbers off of their expected (concentrically Matching) values, with the higher levels of interference causing the Greater of the Shocks. While the concentrically Matching Numbers are signs of localized order within the randomness of the overall 'Ripple Pattern'. In staying with the water analogy, this is something akin to still water being a metaphor for a state of loosely organized randomness, or "Chaos". The overall 'Ripple Pattern' (the water) would settle into this still (though

Chaotic) state of randomness, were it not for the stones which are being tossed into it. These stones, in disturbing the Chaotic stillness of the water, are in effect disturbing the randomness of the surrounding Numbers. It is the size of the stone (this being the value of the Number), along with its energy upon impact, which determine how far out this concentric Ripple of order can travel (in the form of localized, concentric Matching) before being absorbed again by the randomness (stillness), much like the size and speed of a stone which is tossed into a pond will determine the duration and expansion of the ripples in the water, before they are inevitably overcome by the overall stillness of the pond. (Though in this case, with the crowding of the Ripples, the individual Ripples are not overcome by the stillness of the pond, they instead merge into (and are absorbed by) their Neighboring Ripples.)

It was mentioned earlier in this sub-chapter that our choice of stones is somewhat arbitrary, in that these particular stones involve a random selection of Greater and Lesser Numbers. This is an important clarification, one which indicates the Fractal quality of this 'Ripple Pattern' (and therefore of this overall randomness). This Fractality arises from the fact that technically, all of the Numbers which are contained within the overall 'Ripple Pattern' can be considered to be stones. This means that we could have selected any of the Numbers which are contained within the 'Ripple Pattern' to use as stones, as is shown below (with "*"'s shown above the three new stones, for clarity).

*
8122324242315133414143216222415142235122515133216232314252216123424132416...

*
8122324242315133414143216222415142235122515133216232314252216123424132416...

*
8122324242315133414143216222415142235122515133216232314252216123424132416...

Above, we see three alternate stones, which cause three alternate Ripples, all of which display the typical characteristics. The topmost and bottommost examples both involve Lesser stones (these being two red 1's), both of which cause the typical short-lived Ripples. Both of these short-lived Ripples involve more of the Greater Shocks of 2 and 3, and end with concentric 'Shocks Of 4' (both of which are yellowed out), all of which is indicative of a low-energy impact. While the middle example involves a Greater stone (this being the red 5), which causes a longer-lived Ripple, which involves a higher percentage of Matching Numbers (which the other two Ripples contain very few of), and only a few of the Greater 'Shocks Of 2' (with no instances of 'Shocks Of 3' or 'Shocks Of 4'), all of which is indicative of a higher-energy impact.

This all means is that our stone analogy is inaccurate, in that if every Number is a stone, then the pond which is our 'Ripple Pattern' would be filled with stones, not water. This means that these stones are more akin to raindrops, with the accumulation of these raindrops eventually yielding the pond which is the overall 'Ripple Pattern'. The initial line of 1's which is yielded by the initial 'One-Step +1 Pattern' is the initial shallow accumulation of the first raindrops, with all of the following raindrops (those of the 'Two-Step +1' through 'Eight-Step +1' patterns) causing disturbances (Ripples) in the initially smooth (though shallow) pond.

There is more to be said about this overall 'Ripple Pattern', including an explanation of the varying energy levels with which some of the Matching (in value) raindrops are impacting, though

unfortunately, these concepts will have to wait for another book. (While throughout the remainder of this sub-chapter, we will continue to refer to the raindrops as stones, just for the sake of simplicity.)

****

Next, we will highlight the Shocks of 4, 5, and 6 which are contained within these same Ripples, as is shown below, with the 'Shocks Of 4' all **yellowed out**, the 'Shocks Of 5' all **redded out**, and the lone 'Shock Of 6' **greyed out**.

812232424231513
8122324242315133414143216
8122324242315133414143216222415142235
812232424242315133414143216222415142235122515133216
8122324242315133414143216222415142235122515133216232314252216
812232424231513341414321622241514223512251513321623231425221612342413
81223242423151334141432162224151422351225151332162323142522161234241324161233
81223242423151334141432162224151422351225151332162323142522161234241324161233242522
32424231513341414321622241514223512251513321623231425221612342413241612332425221622
24231513341414321622241514223512251513321623231425221612342413241612332425221622241
31513341414321622241514223512251513321623231425221612342413241612332425221622241523
33414143216222415142235122515133216232314252216123424132416123324252216222415232226
14321622241514223512251513321623231425221612342413241612332425221622241523222613241
22415142235122515133216232314252216123424132416123324252216222415232226132414144215

Above, we can see that the six Ripples which contain the Greater of the Shocks (those of 4, 5, and 6) are all caused by the Lesser of the stones (these being the two 1's and the four 2's). This is due to the fact that the Ripples which are caused by the Lesser of the stones are more susceptible to strong interference, as was explained in the previous section.

Next, we will examine this same chart of the extended Ripples, with the Shocks of 1, 2, 3, 4, 5, and 6 all highlighted in their appropriate colors (while the instances of concentrically Matching Numbers are all **blacked out**), and with all of the Numerical representations removed from the chart (with the exception of the stones, which are still represented Numerically).
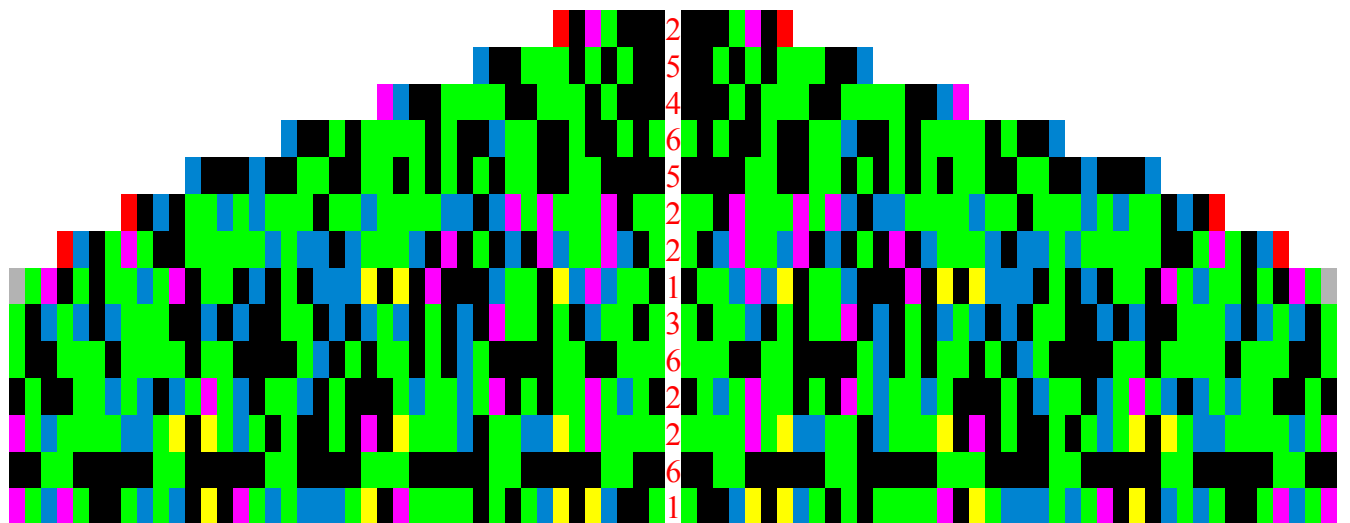
Above, we see a chart which is similar to that which was seen in the previous section, only in this case, a few of the Ripples are carried out a bit further due to the inclusion of the Greater Shocks.

Next, we will realign this chart back into its standard alignment, as is shown below, with a representative sample of this 'Ripple Pattern' shown at the bottom of the chart, in order to help illustrate the alignment of the stones.
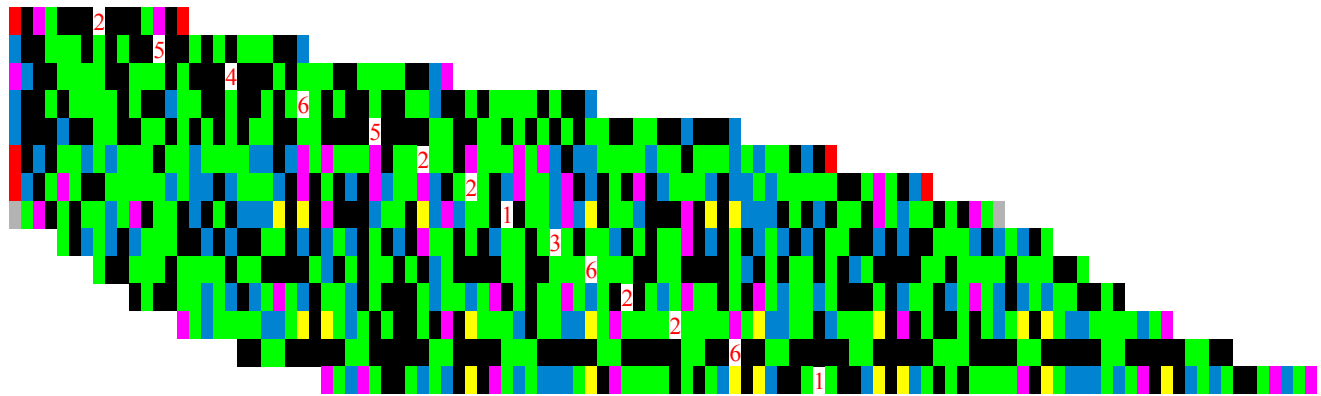
81223242423151334141432162224151422351225151332162323142522161234241324151233242522162224152322261324141442 15

Above, we see a chart which involves the aggregated occurrences of all of the Shocks of 1, 2, 3, 4, 5, and 6, as well as the instances of concentrically Matching Numbers which are involved in each of these Ripples, which together yield a representation of a small percentage of the overall interference pattern which is contained within this complete 'Ripple Pattern'.

That brings this section, and therefore the main part of this sub-chapter, to a close. While the endnotes of this sub-chapter are included below, with these endnotes involving an examination of the various sub-patterns which are contained within the aggregated patterns which yield the complete 'Ripple Pattern' which was examined throughout this sub-chapter (both individually, and as a set).

Endnotes

To begin these endnotes, we will examine the various sub-patterns which are displayed by the individual aggregated patterns which yield this complete 'Ripple Pattern'. We will start with a chart which involves a list of all of these individual aggregated patterns, up to and including the 'Eight-Step +1 Pattern', which is shown below (with each of these aggregated patterns shown through eighty digits). (To clarify, the topmost row of Numbers which is contained in the chart which is shown below contains the 'One-Step +1 Pattern', the second row of Numbers contains the 'One-Step +1 Pattern' and the 'Two-Step +1 Pattern' together, the third row of Numbers contains the 'One-Step +1 Pattern', the 'Two-Step +1 Pattern', and the 'Three-Step +1 Pattern' together, etc. .)

11111111111111111111111111111111111111111111111111111111111111111111111111111111...
21212121212121212121212121212121212121212121212121212121212121212121212121212121...
31222131222131222131222131222131222131222131222131222131222131222131222131222131...
41223131322141223131322141223131322141223131322141223131322141223131322141223131...
51223231323141233131422142222314132224122413133214132313232215122323132314123313...
61223241323151233141422152222315132225122414133215132314232216122324132315123314...
71223242323151333141432152224151322351224151332152323142422161233241324151233241...
81223242423151334141432162224151422351225151332162323142522161234241324161233241...

The eight horizontal rows of Numbers which are seen above contain a variety of sub-patterns, four of which are highlighted below (within the first four rows), with the first four iterations of each of these relatively simple sub-patterns all highlighted arbitrarily in green, red, blue, and then purple (in that order).

11111111111111111111111111111111111111111111111111111111111111111111111111111111...
21212121212121212121212121212121212121212121212121212121212121212121212121212121...
31222131222131222131222131222131222131222131222131222131222131222131222131222131...
41223131322141223131322141223131322141223131322141223131322141223131322141223131...
51223231323141233131422142222314132224122413133214132313232215122323132314123313...
61223241323151233141422152222315132225122414133215132314232216122324132315123314...
71223242323151333141432152224151322351224151332152323142422161233241324151233241...
81223242423151334141432162224151422351225151332162323142522161234241324161233241...

Above, we can see that each of the first four rows displays its own unique and Infinitely repeating sub-pattern, with each of these sub-patterns containing a Greater Quantity of digits than those previous. These sub-patterns can be considered to be a form of 'Repetition Pattern', though these individual 'Repetition Patterns' do not display any easily definable patterned behaviors. (This means that these 'Repetition Patterns' do not contain any readily identifiable 'Progressive Patterns').

Moving on, the next three rows of Numbers contain similar 'Repetition Patterns', all of which are highlighted below, with the first and second iterations of these 'Repetition Patterns' highlighted in green and red, respectively (though in the case of the seventh row, less than one full iteration of the 'Repetition Pattern' is shown (in red), as that particular 'Repetition Pattern' runs well beyond the end of this eighty-digit set of rows). (From this point on, the first four rows of Numbers will be shown in non-highlighted black, as we will no longer be working with these rows.)

11111111111111111111111111111111111111111111111111111111111111111111111111111111...
21212121212121212121212121212121212121212121212121212121212121212121212121212121...
31222131222131222131222131222131222131222131222131222131222131222131222131222131...
41223131322141223131322141223131322141223131322141223131322141223131322141223131...
51223231323141233131422142222314132224122413133214132313232215122323132314123313...
61223241323151233141422152222315132225122414133215132314232216122324132315123314...
71223242323151333141432152224151322351224151332152323142422161233241324151233241...
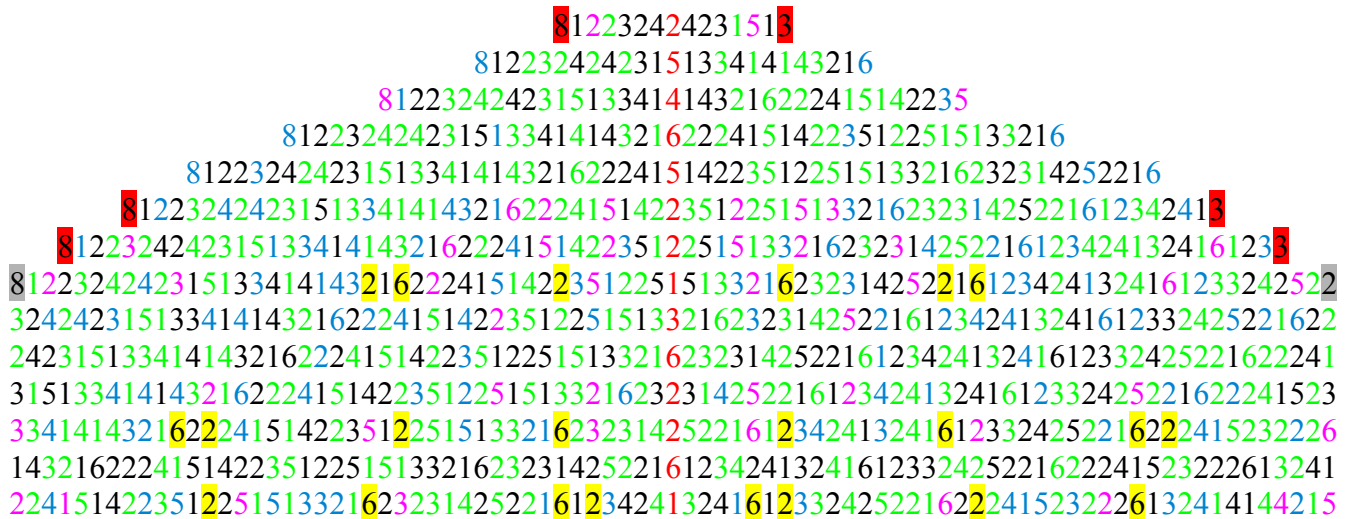81223242423151334141432162224151422351225151332162323142522161234241324161233241...

Above, we can see that the 'Repetition Patterns' which are contained within the fifth and sixth rows have reached the end of their respective first iterations, while the first twenty digits of their respective second iterations are highlighted in red. Though the 'Repetition Pattern' which is contained within the seventh row has not yet reached the end of its first iteration.

Next, we will carry all of these individual aggregated patterns out through another set of eighty-digit horizontal rows, in order to finish tracking the 'Repetition Patterns' which are contained within the fifth and sixth rows (and also to try to find a repetition point in the 'Repetition Pattern' which is contained within the seventh row), as is shown below.

11111111111111111111111111111111111111111111111111111111111111111111111111111111...
21212121212121212121212121212121212121212121212121212121212121212121212121212121...
22213122213122213122213122213122213122213122213122213122213122213122213122213122...
32214122313132214122313132214122313132214122313132214122313132214122313132214122...
42214222314132224122413133214132313232215122323132314123313142214222314132224122413133214132324122...
42215222315132225122414133215132314232216122324132315123314142215222315132225122414133215132325122...
42216222315232225132414134215132414232226122325132315223314152215223315132325122...
52216222415232226132414144215132514232227122325142315223414152216223315142325122...

Above, we can see that the 'Repetition Patterns' which are contained within the fifth and sixth rows have reached the end of their respective second iterations, while the first forty digits of their respective third iterations are highlighted in blue. Though the 'Repetition Pattern' which is contained within the seventh row still has not reached the end of its first iteration.

Next, we will carry all of these individual aggregated patterns out through another set of eighty-digit horizontal rows, as is shown below.

11111111111111111111111111111111111111111111111111111111111111111111111111111111...
21212121212121212121212121212121212121212121212121212121212121212121212121212121...
21312221312221312221312221312221312221312221312221312221312221312221312221312221...
31313221412231313221412231313221412231313221412231313221412231313221412231313221...
41313321413231323221512232313231412331314221422231413222412241313321413231323221...
41413321513231423221612232413231512331414221522231513222512241413321513231423221...
42413321613231433221613232413331512341414222522231613222522241414321513331423231...
52413321713231434221613242413331612341415222522241613222622241415321513341423231...

Above, we can see that the 'Repetition Patterns' which are contained within the fifth and sixth rows have reached the end of their respective third iterations, while the first sixty digits of their respective fourth iterations are highlighted in purple. Though the 'Repetition Pattern' which is contained within the seventh row still has not reached the end of its first iteration.

Next, we will carry all of these individual aggregated patterns out through another set of eighty-digit horizontal rows, as is shown below (with fifth and sixth rows of Numbers shown in non-highlighted black, as we will no longer be working with these rows).

11111111111111111111111111111111111111111111111111111111111111111111111111111111...
21212121212121212121212121212121212121212121212121212121212121212121212121212121...
31222131222131222131222131222131222131222131222131222131222131222131222131222131...
41223131322141223131322141223131322141223131322141223131322141223131322141223131...
51223231323141233131422142223141322241224131332141323132322151223231323141233131...
61223241323151233141422152223151322251224141332151323142322161223241323151233141...
61223341323161233142422152323151332251225141332251323152322162223241423151243141...
71223341423161234142422162323151432251226141332261323152422162224241423161243141...

Above, we can see that the 'Repetition Pattern' which is contained within the seventh row still has not reached the end of its first iteration . Therefore, we will carry all of these individual aggregated patterns out through another set of eighty-digit horizontal rows, as is shown below.

11111111111111111111111111111111111111111111111111111111111111111111111111111111...
21212121212121212121212121212121212121212121212121212121212121212121212121212121...
22213122213122213122213122213122213122213122213122213122213122213122213122213122...
32214122313132214122313132214122313132214122313132214122313132214122313132214122...
42214222314132224122413133214132313232215122323132314123313142214222314132224122...
42215222315132225122414133215132314232216122324132315123314142215222315132225122...
42315222325132226122414233215142314233216122424132325123315142215322315142225123...
52315222425132227122414243215142414233217122424142325123415142216322315152225123...

Above, we can see that the 'Repetition Pattern' which is contained within the seventh row still has not reached the end of its first iteration. Therefore, we will carry all of these individual aggregated patterns out through another set of eighty-digit horizontal rows, as is shown below.

11111111111111111111111111111111111111111111111111111111111111111111111111111111...
21212121212121212121212121212121212121212121212121212121212121212121212121212121...
21312221312221312221312221312221312221312221312221312221312221312221312221312221...
31313221412231313221412231313221412231313221412231313221412231313221412231313221...
41313321413231323221512232313233141233131422142223141322241224131332141323132322...
41413321513231423221612232413233151233141422152223151322251224141332151323142322...
41413331513232423221712232423233151333141432152224151322351224151332152323142422...
51413331613232424221712242423233161333141532152225151322361224151432152324142422...

Above, we can see that the 'Repetition Pattern' which is contained within the seventh row has finally reached the end of its first iteration, while the first sixty digits of the second iteration of the 'Repetition Pattern' are highlighted in red.

At this point, we have determined that the first seven of these horizontal rows of Numbers all contain 'Repetition Patterns', which indicates that the eighth horizontal row of Numbers most likely contains a 'Repetition Pattern' as well. Though given the variable 'Growth Pattern' which is displayed by the Quantities of digits which are contained within each of these 'Repetition Patterns', it would likely be prohibitively complicated to determine the repetition point of the 'Repetition Pattern' which is assumed to be contained within the eighth row of Numbers, therefore we will just move on to other sub-patterns.

(To clarify, this variable 'Growth Pattern' involves the Functions of "X2", "X3", "X2", "X5", "X1", and "X7", in that "1X2=2", "2X3=6", "6X2=12", "12X5=60", "60X1=60", and "60X7=420".)

Next, we will take a quick look at the somewhat vague sub-pattern which is displayed by the condensed sums of these seven 'Repetition Patterns' (with these condensed sums being 1, 3, 2, 7, 2, 3, and 9). This sub-pattern displays a flawed form of concentric Matching, as is shown below.

<p style="text-align:center">1, 3, 2, 7, 2, 3, 9</p>

Above, we can see that the two 2's which surround the center 7 display Matching between one another, as do the two 3's which are oriented one concentric step out from there (with all of these concentrically Matching Numbers highlighted arbitrarily in blue). While the pair of Numbers which is oriented one concentric step out from there involves the 1 and the 9 (both of which are highlighted arbitrarily in red), with these two Numbers involving a separation of 1.

Next, in looking at the vertical columns of Numbers which are contained within the charts which are seen above (these being the various lists of eight eighty-digit rows), we can see that these vertical columns contain occasional occurrences of straight runs of the Numbers 1-8, all of which (with the exception of the first) are flawed, with these flaws diminishing as the rows progress horizontally. The first of these vertical columns (that in which all of the 'Repetition Patterns' begin their first iterations) contains the only non-flawed run of the Numbers 1-8. Then, the sixty-first vertical column (that in which the 'Repetition Patterns' which are contained within the fifth and sixth rows begin their second iterations) contains the Numbers 1,2,3,4,5,6,6, and 6, with the flaws occurring on the last two 6's, which obviously should be the 7 and the 8, respectively. Next, the one hundred and twenty-first column (that in which the 'Repetition Patterns' which are contained within the fifth and sixth rows begin their third iterations) contains a run of the Numbers 1,2,3,4,5,6,6, and 7. While this run of Numbers is still flawed, it is a bit closer to the straight run of the Numbers 1-8 which the first column displayed. Then, the four hundred and twenty-first column (that in which the 'Repetition Pattern' which is contained within the seventh row begins its second iteration) contains the Numbers 1,2,3,4,5,6,7, and 7. This run of Numbers is a bit closer to a straight run of 1-8, though it still involves the flaw of the extra 7 at the end (which should instead be the 8). This all indicates that these vertical columns are working their way back to another straight run of the Numbers 1-8, which we would assume will be contained within the same column as the start of the second iteration of the 'Repetition Pattern' which is assumed to be contained within the eighth horizontal row.

Finally, again working with the vertical columns of Numbers which are contained within the charts which are seen above, we will examine the sub-pattern which involves the vertical columns of Numbers which consist exclusively of 1's. This sub-pattern also involves the concept of 'Prime Numbers', with the term *'Prime Numbers'* describing the same traditional and Quantum Mathematical concept, as was explained in "Chapter One". In order to indicate this aspect of the sub-pattern, we will highlight all of the vertical columns of exclusive 1's which are contained within the first eighty digits of the list of aggregated patterns in red, as is shown below.

```
1 1111111111 11 11111 11 11111 111111 11 11111 1111 11 1111 111111 11111 11 11111 1111 11 111111...
2 1212121212 12 12121 21 12121 212121 21 12121 2121 21 2121 212121 12121 21 12121 2121 21 212121...
3 1222131222 13 12221 31 12221 312221 31 22213 1222 13 1222 131222 13122 21 31222 1312 22 131...
4 1223131322 14 12231 31 13221 412231 31 32214 1223 13 1322 141223 13132 21 41223 1313 22 141223131...
5 1223231323 14 12331 31 14221 422231 41 32224 1224 13 1332 141323 13232 21 51223 2313 23 141233131...
6 1223241323 15 12331 41 14221 522231 51 32225 1224 14 1332 151323 14232 21 61223 2413 23 151233141...
7 1223242323 15 13331 41 14321 522241 51 32235 1224 15 1332 152323 14242 21 61233 2413 24 151233241...
8 1223242423 15 13341 41 14321 622241 51 42235 1225 15 1332 162323 14252 21 61234 2413 24 161233241...
```

The highlighted columns which are seen above form a pattern which involves the first twenty-two 'Prime Numbers', with the exception of the first four 'Prime Numbers', these being 2, 3, 5, and 7 (with these being the only single-digit 'Prime Numbers'). This is shown below, with the vertical columns counted from left to right, and the first twenty-two 'Prime Numbers' shown above their appropriate columns. (In relation to this particular sub-pattern, the leftmost of the vertical columns will be considered to be column 0, as is required in order for the highlighted columns to display Matching in relation to the 'Prime Numbers'.)

```
    2 3  5  7      11 13      17 19      23          29 31        37      41 43      47        53          59 61        67      71 73      79
    v v  v  v      v  v       v  v       v           v  v         v       v  v       v         v           v  v         v       v  v       v
1 1111111111 11 11111 11 11111 111111 11 11111 1111 11 1111 111111 11111 11 11111 1111 11 111111...
2 1212121212 12 12121 21 12121 212121 21 12121 2121 21 2121 212121 12121 21 12121 2121 21 212121...
3 1222131222 13 12221 31 12221 312221 31 22213 1222 13 1222 131222 13122 21 31222 1312 22 131...
4 1223131322 14 12231 31 13221 412231 31 32214 1223 13 1322 141223 13132 21 41223 1313 22 141223131...
5 1223231323 14 12331 31 14221 422231 41 32224 1224 13 1332 141323 13232 21 51223 2313 23 141233131...
6 1223241323 15 12331 41 14221 522231 51 32225 1224 14 1332 151323 14232 21 61223 2413 23 151233141...
7 1223242323 15 13331 41 14321 522241 51 32235 1224 15 1332 152323 14242 21 61233 2413 24 151233241...
8 1223242423 15 13341 41 14321 622241 51 42235 1225 15 1332 162323 14252 21 61234 2413 24 161233241...
```

Above, we can see that these columns of exclusive 1's display Matching in relation to the first twenty-two 'Prime Numbers', with the exception of the 2, the 3, the 5, and the 7 (these being the single-digit 'Prime Numbers'), all of which are highlighted arbitrarily in red. While in this case, the column which corresponds to the 1 displays this exclusive 1 behavior, which indicates that for our current purposes, the 1 can be considered to be a 'Prime Number' (though traditionally, the 1 is not considered to be a 'Prime Number').

This behavior carries on beyond this eighty-digit example, as can be seen with the next set of eighty-digit horizontal rows, which is shown below.

```
     83        89        97    101 103  107 109  113          122        127  131        137 139  144        149 151        157
     v         v         v     v   v    v   v    v            v          v    v          v   v    v          v   v          v
1 111 1 11111 1 1111111 1 1111 11 1111 11 1111 1111111 11111 1 1111 111111 11 1111 11111 11 11111 11 11111 111...
2 121 2 12121 2 1212121 2 1212 12 1212 12 1212 1212121 21212 1 2121 212121 21 2121 21212 12 12121 21...
3 222 1 31222 1 3122213 1 2221 31 2221 31 2221 3122213 12221 3 1222 131222 13 1222 13122 21 31222 13122213122...
4 322 1 41223 1 3132214 1 2231 31 3221 41 2231 3132214 12231 3 1322 141223 13 1322 141223 13 13221 41223...
5 422 1 42223 1 4132224 1 2241 31 3321 41 3231 3232215 12232 3 1323 141233 13 1422 142223 14 13222 41233...
6 422 1 52223 1 5132225 1 2241 41 3321 51 3231 4232216 12232 4 1323 151233 14 1422 152223 15 13222 51233...
7 422 1 62223 1 5232225 1 3241 41 3421 51 3241 4232226 12232 5 1323 152233 14 1522 152233 15 13232 51233...
8 522 1 62224 1 5232226 1 3241 41 4421 51 3251 4232227 12232 5 1423 152234 14 1522 162233 15 14232 51233...
```

Above, we can see that this set of eighty-digit rows displays behavior which is similar to that which is displayed by the first set of eighty-digit rows, though in this case, two of the Numbers which are seen above the columns are highlighted arbitrarily in blue. These blue Numbers indicate the two red columns of exclusive 1's which do not correspond to a 'Prime Number'. These flaws arise due to the fact that this overall concept currently only involves eight individual "+1" patterns (these being the 'One-Step +1 Pattern', the 'Two-Step +1 Pattern', the 'Three-Step +1 Pattern', etc.), where as the inclusion of additional "+1" patterns would eliminate some of these columns of exclusive 1's. (For example, the 'Sixty-One-Step +1 Pattern' would eliminate the one-hundred and twenty-second column of exclusive 1's, while the 'Twelve-Step +1 Pattern' would eliminate the one-hundred and forty-fourth column of exclusive 1's.)

This 'Prime Number' behavior maintains to Infinity, and has to do with the overall concept of Multiples, which has been seen in a few of the previous chapters. Also, while the blue flaws which are contained within the second set of eighty-digit rows would be eliminated through the inclusion of more horizontal rows (such as a 'Nine-Step +1 Pattern', a 'Ten-Step +1 Pattern', an 'Eleven-Step +1 Pattern', etc.), as was explained a moment ago, at this point, I am not entirely sure of the cause of the red flaws (those which involve the single-digit 'Prime Numbers'), as these red flaws cannot be corrected through the inclusion of more horizontal rows.

The sub-pattern which is seen above indicates the connection between 'Prime Numbers' and 'Quantum Mathematics' (especially the '3,6,9 Family Group'), which unfortunately will not be covered in this book. However, those who are interested in the general connection between digital root (condensive) Mathematics and 'Prime Numbers' should consult "www.PrimesDemystified.com", where Gary William Croft has taken a unique and fascinating look at the overall concept of 'Prime Numbers'.